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PROGRAMS IN TEACHER EDUCATION
FOR EXCEPTIONAL CHILDREN
IN
CALIFORNIA STATE COLLEGES

by

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I

PURPOSE OF THE REPORT

California has long been recognized as a state which has made great strides in the education and care of children with special needs. Legislation has been enacted which permits the public schools to provide special classes and services for physically handicapped and mentally retarded children. According to Section 9602 of the California Education Code physically handicapped children are defined as follows:

"Any minor who, by reason of physical impairment, cannot receive full benefit of ordinary education facilities, shall be considered a physically handicapped individual. ... Minors with speech disorders or defects shall be considered as being physically handicapped."

With regard to mentally retarded children Section 9301 of the same code gives the following definition:

"'Mentally retarded minors' means all minors of compulsory school age who because of retarded intellectual development as determined by individual psychological examination are incapable of being educated profitably and efficiently through ordinary classroom instruction but who may be expected to benefit from special educational facilities designed to make them economically useful and socially adjusted."

For the purpose of this report the term "exceptional children" will refer to those minors who are deviant from the average in physical, mental, emotional or social characteristics to the extent that special educational services are required in order to provide them with a beneficial educational experience. Accordingly, reference hereafter to "special education" will pertain exclusively to the education of such children.

The institutions which serve the handicapped--such as the schools for the blind, deaf and cerebral palsied--have all been expanded and improved. The increased activities of the State Department of Health, the State Department of Mental Hygiene and the California Youth Authority have all been instrumental in the development of a rapidly expanding program.

One of the key problems in the development of the program has been that of an adequate supply of properly trained teachers. The mandatory legislation requiring school districts to set up classes for mentally retarded children has resulted in a large demand for teachers trained in this field. Because of the increased interest in the problems of handicapped children the demand for teachers in all areas of the exceptional child likewise has been greatly increased. Moreover, due to the teacher shortage, which has been accentuated by the difficulty of recruitment in special fields, many teachers who have little or no training in terms of the problems of these children, are being employed on emergency credentials.

In order to consider objectively the training needs for teachers of exceptional children in California this study will analyze the existing programs of training in California colleges and universities in the following areas of

specialization for which state legislation has been enacted:* (1) Blind; (2) Partially Sighted; (3) Deaf; (4) Hard of Hearing; (5) Speech Defective; (6) Orthopedically Handicapped, including the Cerebral Palsied; (7) Mentally Retarded; and (8) Administration and Supervision of Special Education.

It should be noted that only limited data are presented concerning two areas of exceptional children--namely, the gifted child and the emotionally disturbed and/or socially maladjusted child. Briefly, such delimitation in this study is necessitated by the general absence of any recommended programs in either of these areas. While there is evidence nation-wide of a few isolated courses concerned with the education of the gifted, there has been to date no semblance of an established program in any California university or college. With regard to the emotionally disturbed and/or the socially maladjusted, on the other hand, there are considerable data as the result of research in the fields of psychology, sociology and education; there are numerous college course offerings which deal with the problems of delinquency, mental hygiene, child psychiatry, etc. in California as well as elsewhere. The fact remains, however, that few programs have been established to train teachers in terms of these problems; one exception is the internship training program offered by San Francisco State College in cooperation with the California Youth Authority. A number of colleges emphasize this problem in their guidance and counseling training programs.

A 1945-46 study of the teacher education programs in the various colleges and universities in the State, conducted by the California Congress of Parents and Teachers, Inc., revealed that few programs of training were offered for teachers of the exceptional children listed above and that no institution of higher learning maintained a center for the training of personnel to work with handicapped children as a major part of its curricular offering. The only exceptions to this situation were: (1) several excellent programs in speech correction, and (2) a University of California summer session course dealing with the cerebral palsied child. Hence, organizations which provided scholarship funds for teachers in special education, such as the California Congress of Parents and Teachers, found it necessary to send students out of the state for their professional training.

In order to provide adequate training within the state, legislation was approved in 1947 authorizing the State Board of Education to designate one of the California State Colleges as a center for the establishment of teacher training programs in the areas of the blind, partially sighted, deaf, hard of hearing, speech defective, orthopedically handicapped including the cerebral palsied, and the mentally retarded. San Francisco State College was selected to develop this program and was given an appropriation of \$35,000 to initiate the authorized training. The program is now an integral part of the curricular offerings at this college.

Since the establishment of the San Francisco Center other California State Colleges have received requests for courses in one or more of these special areas

* For a complete statement of this legislation consult pertinent sections of the California Education Code; also refer to the California Administrative Code, Title 5: Education.

and have been anxious to provide such services to their respective localities. To meet these demands the presidents of these colleges in 1949 agreed that the training of teachers in the areas of the hard of hearing, speech defective and mentally retarded might be given by any state college which believed such offerings should be added to its program. General survey courses in the field of exceptional children were also recommended for all state colleges. Because of the requirements of a trained faculty, clinical and library facilities and the limited number of positions available, it was agreed that training in the areas of the blind, the deaf and the orthopedically handicapped, including the cerebral palsied, should be given by only one institution. This agreement is in effect at the time of the present study.

The purpose of this study is to examine the present teacher education programs pertinent to the previously mentioned areas of exceptional children which exist in the California State Colleges. Findings will be analyzed in terms of the following:

1. Employment needs and vocational opportunities in California.
2. Scope of present offerings in terms of staff, equipment and materials, clinical and laboratory facilities, library resources and costs.
3. Recommendations for any modifications of existing programs.

In order to present a more complete picture of training opportunities as they exist on a state-wide basis, certain pertinent information regarding colleges and universities other than the state colleges is also included in this report since a number of these other institutions are now offering training in some of the special areas under consideration.

Finally, for the sake of clarification, it should be mentioned that this report will not include--except by a general statement in the narrative summary of each college's program--data relative to the following areas of training: school psychologist, psychometrist, guidance and counseling, educational or applied psychology or any others which are not specifically teacher education curricula pertaining to exceptional children.

II

EMPLOYMENT NEEDS AND VOCATIONAL OPPORTUNITIES IN SPECIAL EDUCATION

Purpose: The specific function of this portion of the report is to estimate the approximate number of teachers in special education that California will need to train and employ in order to develop an optimum program in each of the eight following special areas: blind, partially sighted, deaf, hard of hearing, speech correction, mentally retarded, orthopedically handicapped and general palsied.

General Procedure and Method: This study is based upon the following essential data:*

1. An estimate of the total public school population from kindergarten through grade 12 for 1951 and the predicted increase for a ten year period through 1960.
2. A state-approved estimate of the percent of incidence in the public school population of the handicapping condition in each of the designated special areas for 1951 and 1960, respectively.
3. The use of a workable, realistic, state-approved figure for a "Recommended Class Size and/or Case Load" in each of the designated areas.
4. An estimate of the approximate number of special teachers now employed in each of the designated areas.
5. An estimate of the probable replacement percentage for each year and for the ten year period.

Findings.

The information compiled in Table I, "Estimate of Teacher Needs in Special Education in California for the period 1951-1960" summarizes the basic data pertaining to this section of the report. The following paragraphs further

*The Bureau of Special Education of the California State Department of Education is now in the process of gathering data for two additional estimates that will round out this study, namely:

1. An estimate of the number of teachers with emergency or provisional certificates needing further training in order to complete state requirements for a credential in the field, and
2. An estimate of the number of credentialed special teachers trained out of state.

It seems probable, however, from the evidence and observations available to date, that additions from the first estimate will, over a period of ten years, be cancelled or partially cancelled by the subtractions from the second estimate. (For a more detailed exposition of these items see p. 7 of this report).

explain and augment Table I. In this table the orthopedically handicapped and the cerebral palsied are considered separately; in the remainder of this report they are combined.

Column I Total Public School Enrollment. The figures given for estimated public school population, 1951 and 1960, represent public school enrollment for kindergarten through grade 12, inclusive. These data are taken from "California's Future School Population 1948-1960", Research Bulletin No. 3, October 1948, prepared by the Research Department of the California Teachers' Association. The table on "Total Public School Enrollment K-12" in the above mentioned research bulletin gives a middle estimate and a high estimate. Column I, Table I, of this report uses the middle estimate. In terms of population distribution, the best estimates show that approximately 55% of this population resides in Southern California and 45% in Northern California.

Column II Areas of Special Education. The area of the hard of hearing is comprised of two categories: (HA) is an estimate of the need for teachers in special day classes, and (HB) an estimate of the need for special education teachers who instruct on an itinerant basis.

Column III Percent of Incidence. There is considerable difference of opinion among authorities, writers and workers as to the percent of incidence of some of the handicapping conditions of educable school children in need of special education. The following percentages represent the most reliable estimates available:*

Blind	.05%
Partially Sighted	0.2%
Deaf	0.1%
Hard of Hearing	1.5-5.0%
Speech Defective	5-10%
Mentally Retarded	2-4%
Orthopedically Handicapped (educable)	0.33%
Cerebral Palsied	0.2-0.3%

Column IV Number of Pupils Needing Special Education. The estimated public school enrollment for each year multiplied by the percent of incidence concerned gives the probable number of pupils needing special education in the respective areas. In the field of the blind, for example, $1,699,250 \times .05 = 850$ blind pupils in the public schools of California in need of Special Education in 1951.

* The incidence figures used in this study have been derived from an analysis of the literature dealing with this problem and from consultation with appropriate personnel in the State Department of Education and several colleges and universities.

Column V: Recommended Class Size or Case Load. The figures which are given here are approximate and in some instances controversial. They were arrived at after interviews with the State Bureau of Special Education, with members of college and university staffs, and with key workers in the field. In most areas a range for class size or case load was recommended, and in this report the median of the range has been used. In some areas, particularly the partially sighted and the speech defective, the methods of handling children on the basis of itinerant instruction or special day instruction has added considerably to the problem of recommending a class size or case load. The decision made here has been dictated by the realities of the situation in terms of what is feasible, practical and possible.

Column VI: Probable Number of Teachers Needed Over Ten Year Period Due to Population Increase. The figures given here are determined by dividing the "Number of Pupils Needing Special Education" (Col. IV), by the "Recommended Class Size or Case Load, (Col. V)", for the years 1951 and 1960, respectively. The difference between the results for 1960 and those for 1951 gives the total increase in teachers needed in each area due to population increase alone.

Column VII: Backlog: This figure is arrived at by subtracting the approximate total number of teachers employed in 1950 in each area from the optimum recommended in Column VI for 1951 in each area. For example, approximately 40 teachers of the blind were employed in the State of California in 1950. On the basis of population, incidence of the handicap, and recommended class size, 85 teachers of the blind should be employed in an optimum program in 1951 to meet the need. This results in a backlog or shortage of 45 teachers (85-40) at the beginning of 1951.

In order to fulfill the needs of an optimum program in each area the total shortage or backlog for each area must be added to the total increase in teachers needed in each area due to population increase.

Column VIII: Replacements. To the total of special teachers needed in each area on the basis of population increase, and to the total of teachers needed to absorb the backlog that would have been employed had there been an optimum program in 1950, should be added the total number of teachers needed to replace those who leave their positions each year.

Replacement figures for teachers in the regular classrooms of the public schools of the state are estimated by the State Department of Education to be approximately 7.5% to 10% per year. Replacement percentages for teachers in special education are not available, but because of their specialized training and the nature of their work the State Department of Education estimates that 5% replacement each year is a probable figure for teachers in the special areas.

Column IX: Total Number of Teachers Needed in California for An Optimum Program. Add columns VI, VII, and VIII. The addition of these three columns gives the total number of teachers needed in California due to: (1) population increase (2) shortage or backlog at the beginning of 1951 and (3) replacement for the ten-year period 1951-1960.

Column X: Estimated Number of Teachers Needed to be Trained by California Colleges for an Optimum Program 1951-1960.

<u>Area of Special Education</u>	<u>Estimate of Approximate Number of Teachers Needed to be Trained*</u>
Blind	100-150
Partially Sighted	150-200
Deaf	275-325
Hard of Hearing	2000
Speech Correction	1250-1500
Mentally Retarded	4500-5000
Cerebral Palsied	450-500
Other types of Orthopedic Handicap	450

Some Tentative Interpretations and Conclusions:

1. Based upon an optimum program the yearly teacher needs can be estimated to be 10% of the totals projected in Column I of Table I. Upon this basis the following number of teachers should be trained in California for the ten year period.

<u>Area</u>	<u>Optimum each year</u>
Blind	10-15
Partially Sighted	15-20
Deaf	25-35
Hard of Hearing	200
Speech Correction	125-150
Mentally Retarded	450-500
Cerebral Palsied	45-50
Other types of Orthopedic Handicap	45

* In order to arrive at this estimate more exactly, it will be necessary to have estimates--which the state department of special education is now in the process of gathering--for the following:

- (1) The estimate number of teachers with emergency or provisional certificates who need further training in order to complete state requirements for a credential in the special area concerned.
- (2) The estimate number of credentialed special teachers trained out of state.

The figures ascertained under (1) above should be added to the final estimate in Column X, since these teachers will need further training from California Colleges. The figures ascertained under (2) above should be subtracted from the final estimate in Column X, since these teachers have been trained out of state and will, presumably, receive little if any further training in special education from California Colleges.

It seems probable however, from evidence and observations available to date, that additions from the first estimate will, over a ten year period, be cancelled or partially cancelled by the subtractions from the second estimate. Consequently the figures given in Column X are believed to be fairly reliable as they now appear.

2. In view of the need for further program development in the state it seems more realistic to assume that not more than 50 to 60% of the teachers needed for an optimum program can actually be employed by the public schools. Upon the basis of this estimate the following number of teachers should be trained each year:

<u>Area</u>	<u>Probable each year</u>
Blind	5-8
Partially Sighted	7-10
Deaf	12-18
Hard of Hearing	50-75
Speech Correction	75-100
Mentally Retarded	250-350
Cerebral Palsied	25-35
Other types of Orthopedic Handicap.	22-25



TABLE I

ESTIMATE OF TEACHERS NEEDED IN SPECIAL EDUCATION IN CALIFORNIA FOR THE PERIOD 1951-1960

I	II	III	IV	V	VI	VII	VIII	IX	X	
YEAR	TOTAL PUBLIC SCHOOL ENROLLMENT (Kindergarten through the 12th Grade)	AREA OF SPECIAL EDUCATION	PERCENT OF INCL- DENCE	NO. OF PUPILS NEEDING SPECIAL EDUCATION	RECO- MENDED CLASS SIZE OR CASE LOAD (Approx.)	PROB. NO. OF TCHRS NEEDED OVER 10 YR. PERIOD DUE TO POPULA- TION IN- CREASE	BACKLOG: (DIFF. BET. APPROX. NO. TCHRS EMPLOYED '50 & RECOM. OPTIMUM FOR 1951)	REPLACE- MENTS OVER 10 YR. PD. (Approx.) 5% per yr.	TCHRS. NEEDED IN CALIF. (total of Columns VI, VII & VIII)	BEST OF APPROX. NO. OF TCHRS. NEEDED TO BE TURNED BY CALIF COLLEGES FOR OPTIMUM PROGRAM 1951-1960
1951 1960	1,699,250 (1) 2,342,500	BLIND	.05	850 1171	10	85 117 32	(85-40) 45			
1951 1960	1,699,250 (2) 2,342,500	PARTIALLY SIGHTED	.20	3399 4685	30	113 156 43	(113-35) 78	40	117	100-150
1951 1960	1,699,250 (3) 2,342,500	DEAF	.1	1699 2343	8	212 293 81	(212-100) 112	49	170	150-200
1951 1960	1,699,250 (4A) 2,342,500	HARD OF HEARING	.5 (sp. day pupils)	8496 11713	10	850 1171	(850-18)	105	298	275-325
1951 1960	1,699,250 (4B) 2,342,500	HARD OF HEARING	1.0 (itiner- ants)	16993	35 Tot. A+B	486 669 504	(486-38) 1236	533	2273	2000
1951 1960	1,699,250 (5) 2,342,500	SPEECH CORREC- TION	5.0	84963 117125	100	850 1171 321	(850-250) 600	393	1304	1250-1500
1951 1960	1,699,250 (6) 2,342,500	MENTALLY RETARDED	3.0	50978 70275	17	3000 4134 1134	(3000-800) 2200	1315	4849	4500-5000

TABLE I (continued)

ESTIMATE OF TEACHERS NEEDED IN SPECIAL EDUCATION IN CALIFORNIA FOR THE PERIOD 1951-1960

I	II	III	IV	V	VI	VII	VIII	IX	X
TOTAL PUBLIC SCHOOL ENROLLMENT (Kindergarten through the 12th Grade)	AREA OF SPECIAL EDUCATION	PERCENT OF INCIDENCE	NO. OF PUPILS NEEDING SPECIAL EDUCATION	RECOM-MENDED CLASS SIZE OR CASE LOAD (Approx.)	PROB. NO. OF TCHRS NEEDED OVER 10 YR. PERIOD DUE TO POPULA-TION IN-CREASE	BACKLOG: (DIFF. BET. APPROX. NO. TCHRS EMPLOYED '50 & RECOM. OPTIMUM FOR 1951)	REPLACEMENTS OVER 10 YR. PD. (Approx.) 5% per yr.	TCHRS. NEEDED IN CALIF. (Total of Columns VI, VII & VIII)	EST. OF APPROX. NO. OF TCHRS. NEEDED TO BE TRAINED BY CALIF COLLEGES FOR OPTIMUM PRGM 1951-1960
1951 1960	GENERAL PALSIED	.25 (educable)	4243 5856	13	327 450 123	(327-102) 225	149	497	450-500
1951 1960	ORTHO-PEDIC	.33 (need special education)	5608 7730	15	374 515 141	*	*	*	450

* Data need for entry is not as yet available; however, the State Department of Education is currently making a study, the findings of which should indicate such information.

III

SUGGESTED OVER-ALL STANDARDS
 ESSENTIAL TO AN ADEQUATE TEACHER EDUCATION PROGRAM
 FOR EXCEPTIONAL CHILDREN

Programs designed to prepare teachers toward the goal of adequately meeting their responsibilities in the education of children and youth must be organized and conducted in terms of well founded criteria and yet be sufficiently flexible in framework that they may benefit from continuing research and keep abreast with current developments of merit. In no sense is this approach less valid with regard to the field of special education; in fact, in its application to the education of exceptional children this approach bears a uniquely profound significance, due to the specialized nature of the work in the field. Hence it was with this point of view in mind and upon the consideration of reliable research data, established programs and authoritative opinion in the field that the over-all standards which constitute this section of the report are offered as suggested guides for the improvement and further development of teacher education for exceptional children.

A Qualified Resident Faculty

Members of the faculty should have had specialized training in their respective areas of specialization. They should possess professional and academic backgrounds which fulfill the requirements for accreditation by the professional association in their respective areas. The academic background and experience should extend considerably beyond the credential requirements for teachers certified in their respective fields. Moreover, each staff member should have a minimum of two years of actual clinical and teaching experience with children in his or her special area. In addition, authorities and specialists in related fields, such as medicine, should be available as consultant resources.

Equipment, Clinical Facilities and Demonstration Classrooms

Typical classes are small because of the problems encountered. Many more classrooms and clinical facilities must be provided than would be required for a general teacher education program. Floor space, in terms of square footage, will exceed that utilized in the latter program.

Considerable special equipment is required for diagnosis and testing, for clinical training and for demonstration classrooms in the various areas of special education.

Because of the dependence of special education on medical facilities, appropriate clinics should be available nearby.

Observation, Clinical Practice and Student Teaching in Specialized Areas

The training center should be situated in a locality of considerable population concentration in order that facilities for observation, clinical practice and student teaching in the several areas of special education will be easily accessible and sufficiently numerous and varied to make the program functional, practicable and realistic.

Library

In addition to an adequate library in the general field of education a technical library in special education should be part of the institution's facilities. Since the work of special education cuts across many related fields, such as that of psychology, there is a need for library facilities which include a complete list of general and specialized professional journals and periodicals in the special and related fields. Some materials related to medical problems should be also included.

Costs

Programs should be planned on a regional basis and in terms of need in order that the maximum service may be provided and that per capita costs may be kept at a minimum.

The remainder of this section of the report is devoted to the application--in the various specialized areas with which this study is concerned--of the above mentioned general criteria.

Suggested Standards for a Teacher Education Program in the Area of the Blind

I. Personnel

A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Emphasis should include:

- (1) Broad background in elementary or secondary education
- (2) Child growth and development with particular emphasis on psychological and sociological foundations
- (3) Professional preparation in field of blind

2. Experience

- a. Classroom teaching experience at the elementary or secondary level, including work with the blind
- b. Clinical, administrative, or supervisory experience with blind children desirable
- c. College teaching desirable

B. Consulting or cooperating staff member

1. Ophthalmologist

II. Representative Materials and Equipment

A. Access to curriculum materials for elementary and secondary fields

B. Specialized equipment

1. Braille equipment

- a. Books
- b. Transcribed materials other than books
- c. Braille writers
- d. Slates and styli
- e. Thermometers, barometer, etc.
- f. Maps (dissected, relief)
- g. Globes (relief)

2. Tactual aids

- a. Raised line guides
- b. Number boards and cubes
- c. Abacuses and brailled measuring devices and various materials for arithmetical aids.
- d. Models
- e. Modeling clay and stands

3. Auditory aids

- a. Talking books
- b. Records for talking books
- c. Tape recorder
- d. Edison voice writer and/or Dictaphone Timemaster
- e. Victrola and music records

4. Typewriters for training in touch typing

5. Material for training in script writing

C. Testing Material adapted to blind children including:

1. Achievement tests for each grade
2. Reading tests (diagnostic)
3. Intelligence tests adapted for the blind

III. Socialized Facilities

A. Classroom and demonstration facilities at the elementary and secondary levels suitable for:

1. Observation
2. Clinical practice
3. Student teaching

B. Clinical facilities at hospital

C. Cooperating agencies

1. Residential school
2. Day school classes
3. Hospitals
4. Cooperating related groups, such as Recreation for the Blind, Center for the Blind, Blind Babies Foundation, Opportunities for the Blind, for observation and experience in group work in the community

IV. Library

- A. Adequate general reference facilities in the foundations of education, psychological and sociological, and general reference material on the education of children at all levels
- B. Specialized material specifically related to education of blind children, including:

1. Books
2. Books in Braille (college level)
3. Journals
4. Periodicals
5. Monographs

V. Curriculum Offerings

A. Accredited program for general education

1. Courses leading to:

- a. An adequate background in the psychological and sociological foundations of education
- b. A basic knowledge of the curriculum at the elementary level (plus the secondary if this is the level at which the student is to work) and its implementation in the education of children
- c. Ability to work successfully with children, co-workers, supervisors and administrators

B. Area offerings

1. Courses leading to:

- a. Understanding of psychological and sociological needs of blind children
- b. Basic knowledge of the physiology of the eye, causes of blindness
- c. Knowledge of the degrees of blindness and the influence of this on the specific individual needs of these children
- d. Ability to adapt the curriculum to the needs of the blind child
- e. Knowledge of Braille and proficiency in teaching this at all levels
- f. Ability to adapt materials and to make use of all specialized equipment in order to facilitate the integration of the blind into a seeing group

2. Observation

- a. Extensive observation of blind children, beginning with nursery school age and continuing with all levels

3. Student teaching

- a. Actual experience in teaching the blind child at different levels and in the following situations:
 - (1) In the residential school
 - (2) In the day school classes

Suggested Standards for a Teacher Education Program in the Area of the Partially SightedI. Personnel



A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Emphasis should include:

(1) Broad background in elementary or secondary education

(2) Professional preparation in field of partially seeing

2. Experience

a. Classroom teaching experience at the elementary or secondary level, including work with partially sighted

b. Clinical, administrative or supervisory experience with partially-seeing children desirable

c. College teaching desirable

B. Consulting or cooperating staff member

1. Ophthalmologist

II. Representative Materials and Equipment

A. Access to curriculum materials for elementary and secondary fields

B. Specialized equipment

1. Large type material

a. Books

b. Transcribed loose leaf or bound material

2. Large-type typewriters and stands

3. Curriculum aids

a. Sight saving maps

b. Globes

c. Large dissected wooden relief maps

d. Educational toys

4. Auditory aids

a. Talking books and records



- b. Victrola and music records
 - c. Rhythm band instruments, tonettes and auto harp
 - d. Tape recorder
 - e. Edison voice writer and/or Dictaphone Timemaster
 - f. Models and charts
- 5. Mechanical aids for enlarging material
 - a. Opaque projector and screen
 - b. Prepared slides and slide projector
 - c. Adequate files for training in filing and use of transcribed material and tapes and records
- 6. Variety of materials for creative expression
- 7. Vision testing equipment
 - a. Plus Lite Vision Box
 - b. A.M.A. Vision Box
 - c. Massachusetts Vision Test
 - d. Telebinocular
 - e. Color vision tests
 - f. Foot candle and brightness meters
 - g. Model of eye and charts
- C. Testing material adapted to the partially seeing
 - 1. Achievement tests in large type
 - 2. Reading tests
 - 3. Mechanical aptitude tests
 - 4. Selected transcribed tests

III. Specialized Facilities

- A. Classroom and demonstration facilities at the elementary and secondary levels suitable for:
 - 1. Observation
 - 2. Clinical practice

3. Student teaching

- B. Adequate facilities for testing and working with individual students
- C. Adequate facilities for vision testing
- D. Clinical facilities at hospital
- E. Cooperating agencies
 - 1. Day school classes
 - 2. Integrative plan for partially seeing
 - 3. Hospitals

IV. Library

- A. Adequate general facilities in the foundations of education, psychological and sociological, and general reference material on the education of children at all levels
- B. Specialized material specifically related to the education of partially seeing children
 - 1. Books
 - 2. Journals
 - 3. Pamphlets
 - 4. Periodicals
 - 5. Monographs

V. Curriculum Offerings

- A. Accredited program for general education
 - 1. Courses leading to:
 - a. An adequate background in the psychological and sociological foundations of education
 - b. A basic knowledge of the curriculum at the elementary level (plus the secondary if this is the level at which the student is to work) and its implementation in the education of children
 - c. Ability to work successfully with children, co-workers, supervisors and administrators
- B. Area offerings
 - 1. Courses leading to:

- a. Understanding of psychological and sociological needs of visually handicapped children
- b. Basic knowledge of the physiology of the eye, the importance of vision, its influence on development, and an adequate eye health program
- c. Knowledge of causes of blindness, eye diseases and difficulties and their influence on learning and behavior
- d. Ability to plan for curriculum adaptations and to prepare materials suited to the separate needs of visually handicapped children

2. Observation

- a. Extensive observations of partially seeing children at all levels both in school and in the clinical situation at the hospital

3. Student teaching

- a. Actual experience in teaching the partially seeing child with experience as the contact teacher planning the work with the regular teacher and assisting the child to adjust to the group

Suggested Standards for a Teacher Education Program in the Area of the Deaf

I. Personnel

A. Resident staff member in Teacher Education

1. Professional education

- a. M.A. to doctorate
- b. Emphasis should include:
 - (1) Broad background in elementary or secondary education
 - (2) Child growth and development and psychological foundations
 - (3) Professional preparation in the field of the deaf

2. Experience

- a. Classroom teaching at the elementary or secondary level; experience with normal children desirable; experience with deaf children essential
- b. Clinical, administrative or supervisory experience with deaf children desirable
- c. College teaching experience desirable



B. Consulting and cooperating staff members:

1. Otologist
2. Social service workers
3. Psychological and educational consultants

II. Representative Materials and Equipment

A. Curriculum materials

1. Access to curriculum materials for elementary and secondary schools
2. Specialized materials for education of the deaf including:
 - a. Sense training materials: e.g. puzzles, small objects, pegboards
 - b. Auditory training materials: e.g. recordings, noisemakers, rhythm band instruments
 - c. Toys for language and speech development: e.g. small objects, dollhouses, housekeeping toys
 - d. Construction materials: e.g. blocks, tools, crafts materials
 - e. Picture files

B. Specialized equipment

1. Group hearing aid
2. Sample individual hearing aid
3. Tape recorder
4. Audiometer
5. Mirrors

C. Testing materials for deaf children

1. Performance test equipment: e.g. Nebraska Test, Grace Arthur Performance Scale
2. Audiometers (see above)
3. Sample tests designed for normal children: intelligence, social maturity

III. Specialized Facilities

- A. Classroom and demonstration facilities at elementary and secondary levels. (Not necessarily on-campus; see C following)



1. Observation
 2. Clinical practice
 3. Student teaching
- B. Adequate facilities for testing
1. Sound proof rooms
 2. Suitable rooms for psychological testing
- C. Cooperating agencies
1. Day schools and day classes for deaf children (both types of program should be available.)
 2. Residential school for the deaf
 3. Hearing societies
 4. Hospital otological clinics
 5. Rehabilitation centers
 6. Speech and hearing clinics

IV. Library

- A. Adequate library for general education
- B. Specific library facilities concerning the deaf
1. Books
 2. Bound volumes of journals and periodicals
 3. Pamphlets
 4. Monographs
 5. Current periodicals and journals

V. Curriculum Offerings

- A. Accredited program for general elementary and general secondary credentials
- B. Area offerings
1. Adequate methods courses for teaching beginning and advanced language and reading to deaf children
 2. Methods courses for teaching speech to beginning deaf children,



for teaching speech to advanced deaf children, and for remedial speech practices for deaf children (These courses should include methods of auditory training or a separate course should be offered.)

3. Courses in curriculum methods for deaf children both in integrated programs and in segregated classes
4. Daily observation of various types of deaf classes for clinical practice and laboratory for course offerings
5. Supervised daily student teaching for at least one semester
6. History of education of the deaf
7. Anatomy and physiology of the ear

Suggested Standards for a Teacher Education Program in the Area of the Hard of Hearing

I. Personnel

A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Emphasis should include:

- (1) Broad background in elementary or secondary education
- (2) Child growth and development and psychological foundations
- (3) Professional preparation in the field of the hard of hearing

2. Experience

a. Classroom teaching at the elementary or secondary level; experience with normal children and with hard of hearing children essential

b. Clinical, administrative or supervisory experience with hard of hearing children desirable

c. College teaching experience desirable

B. Consulting and cooperating staff members:

1. Otologist

2. Social service workers



3. Psychological and educational consultants

II. Representative Materials and Equipment

A. Curriculum materials

1. Access to curriculum materials for elementary and secondary schools
2. Specialized materials for education of the hard of hearing including:
 - a. Auditory training materials: e.g. recordings, noisemakers, rhythm band instruments
 - b. Toys and games for speech improvement, correction, and conservation: e.g. dolls, puppets, toys
 - c. Crafts materials: clay, paints, crayons
 - d. Picture files for speech and lip reading
 - e. Access to an adequate children's library

B. Specialized equipment

1. Group hearing aid
2. Sample individual hearing aid
3. Mirrors
4. Group audiometer
5. Clinical audiometer
6. Tape recorder
7. Three speed record player

C. Testing materials

1. Audiometers (see above)
2. Sample tests: intelligence, social maturity

III. Specialized Facilities

- A. Classroom and demonstration facilities at elementary and secondary levels (Not necessarily on campus: see C following)
 1. Observation
 2. Clinical practice
 3. Student teaching



4. On-campus clinical facilities for clinical practice, individual and group

B. Adequate facilities for testing

1. Sound proof rooms
2. Suitable rooms for psychological testing

C. Cooperating agencies

1. Itinerant teachers in regular schools
2. Contact classes for hard of hearing children with integrative program
3. Hearing societies
4. Hospital otological clinics
5. Rehabilitation centers
6. Speech and hearing clinics

IV. Library

A. Adequate library for General Education

B. Specific library facilities concerning the hard of hearing

1. Books
2. Bound volumes of journals and periodicals in the field
3. Pamphlets
4. Monographs
5. Current periodicals and journals

V. Curriculum Offerings

A. Accredited program for general elementary and general secondary credentials

1. Adequate course offerings in mental hygiene
2. Survey Course on exceptional children

B. Area Offerings

1. Methods of teaching speech reading
2. Beginning and advanced speech correction
3. Methods of auditory training



4. Audiometry

5. Clinical practice and student teaching with the hard of hearing

Suggested Standards for a Teacher Education Program in the Area
of the Speech Defective

I. Personnel

A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Major in field of speech handicapped; emphasis should include:

(1) Broad background in elementary or secondary education

(2) Child growth and development

(3) Background of psychological training

(4) Adequate graduate training in the field of the speech development, speech rehabilitation, audiology and psychology

2. Experience

a. Classroom teaching experience at the elementary level with normal children highly desirable

b. Clinical experience with speech handicapped children essential

c. College teaching experience desirable

B. Consulting or cooperating staff members

1. Clinical psychologists

2. Psychiatrists

3. Laryngologists and otologists and other medical specialists

4. Audiologist

II. Representative Materials and Equipment

A. General

1. Curriculum materials adapted to use with speech handicapped children

2. Audio-visual aides specifically for use in teacher training



B. Special

1. Books, pictures, toys, games
2. Mirrors (large and small and hand mirrors)
3. Recording and playback instruments
4. Phonographs
5. Auditory training units
6. Tape recorders

C. Testing materials adapted to use with speech handicapped children

1. Audiometers
2. Performance tests

III. Specialized Facilities

- A. Classroom and demonstration facilities at elementary and secondary level for observation, clinical testing and student teaching
- B. Special clinical facilities for working with individual children and small groups of children; also sound proofed room for hearing testing of speech handicapped
- C. Cooperating agencies
 1. State Bureau of Special Education
 2. Day classes in the public schools
 3. Speech centers and clinics in area hospitals
 4. Rehabilitation centers
 5. Cerebral Palsy Schools

IV. Library

- A. Adequate library in the field of general education
- B. Specialized library facilities should contain:
 1. Professional books
 2. Curriculum aids and books
 3. Journals
 4. Periodicals



5. Monographs

6. Pamphlets

V. Curriculum Offerings

A. Accredited program for general elementary and general secondary credentials

B. Area offerings

1. Introduction to types, problems and education of handicapped children
2. Speech development and speech improvement methods and activities
3. Diagnosis and correction of speech defects and disorders
4. Observation of various types of speech defects and of the methods of correction and instruction used in clinic and classroom
5. Student teaching in Speech Correction
6. Methods of testing hearing acuity and interpreting test results
7. The teaching of speech (lip) reading to hard of hearing children

Suggested Standards for a Teacher Education Program
in the Area of the Mentally RetardedI. Personnel

A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Major work in field of mentally retarded; emphasis should include:

- (1) Broad background in elementary or secondary education
- (2) Child growth and development and psychological foundations
- (3) Adequate graduate training and research dealing with the mentally retarded

2. Experience

a. Classroom teaching experience at elementary or secondary levels

b. Teaching experience with normal children desirable; teaching experience with mentally retarded children essential



c. Clinical, administrative or supervisory experience desirable

d. College teaching experience desirable

B. Cooperating staff members

1. Clinical psychologists

2. Psychiatrists

3. Reading specialists

4. Speech correctionists

II. Representative Materials and Equipment

A. General: wide sampling of curriculum materials at both elementary and secondary levels

B. Specialized

1. Curriculum materials adapted to use of mentally retarded children on the primary, elementary, junior high, and secondary school levels

a. Many varied conceptually concrete objects obtained or improvised in order to present functional activities, meaningfully related to the life experiences and understanding of mentally retarded children

b. Field trips and other direct experiences involving meaningful life activities in line with the understanding of these children

c. Arts and crafts materials and workshop adapted for use of teachers of the mentally retarded, including such items as:

(1) Hand tools and supplies

(2) Measuring equipment

(3) Gardening equipment and supplies

(4) Paints and brushes, leather and metal working implements and materials, clay modeling materials, block printing, weaving equipment and material

(5) Homemaking equipment and supplies involved in such activities as cooking, sewing, laundrying and cleaning, home maintenance, child care, etc.

d. Health and first-aid equipment and supplies and activities

e. Musical and rhythm instruments



- f. Variety of games and recreational equipment, indoor and outdoor

III. Specialized Facilities

- A. Classrooms and demonstration facilities at elementary and secondary levels for observation, clinical testing and student teaching
- B. Cooperating agencies
 - 1. Child guidance clinics
 - 2. Psychiatric clinics
 - 3. Institutions and special schools for the mentally retarded
 - 4. Rehabilitation centers
 - 5. Employment services
 - 6. Recreational centers
 - 7. Social agencies and health services

IV. Library

- A. Adequate library for general education
- B. Specialized library facilities should contain:
 - 1. Professional books
 - a. General curriculum and methods at all levels
 - b. General and applied psychology
 - c. Mental deficiency and related problems
 - d. Clinical methods and procedures
 - 2. Representative curriculum material adapted to the interests, needs and capacity of the mentally retarded
 - 3. Journals
 - 4. Periodicals
 - 5. Monographs
 - 6. Pamphlets

V. Curriculum Offerings

- A. Accredited program for general elementary and general secondary credentials



B. Area offerings include courses concerned with:

1. Introduction to the problems of exceptional children
2. Curriculum and methods for teaching the mentally retarded
3. Occupational education and vocational guidance of the mentally retarded
4. Speech correction
5. Arts, crafts and creative activities for the mentally retarded
6. Observation and student teaching of the mentally retarded

Suggested Standards for a Teacher Education Program in the Area of the Orthopedically Handicapped, Including the Cerebral Palsied, and Children with Special Health Needs

I. Personnel

A. Resident staff member in Teacher Education

1. Professional education

a. M.A. to doctorate

b. Emphasis should include:

- (1) Broad background in elementary or secondary education
- (2) Child growth and development and psychological foundations
- (3) Professional preparation in the area of the orthopedically handicapped, with particular research relative to the cerebral palsied

2. Experience

- a. Classroom teaching experience at the elementary or secondary level
- b. Teaching of normal children is essential; teaching in special field is essential
- c. Clinical, administrative or supervisory experience with physically handicapped children is desirable
- d. College teaching experience is desirable

B. Consulting or cooperating staff members

1. Medical specialists

2. Physical and occupational therapists
3. Social service workers
4. Psychiatrists and psychologists
5. Educational specialists

II. Representative Materials and Equipment

A. Curriculum materials

1. Access to general curriculum materials used by all children
2. Provision of specific curriculum materials needed by each type of child within this grouping
 - a. Orthopedically handicapped
 - b. Cerebral palsied
 - c. Children with special health needs

B. Equipment

1. Usual standard equipment for modern elementary or secondary school
2. Special equipment as needed
 - a. Furniture to meet individual physical needs
 - b. Rest and lunch facilities readily accessible to unit
 - c. Therapeutic training equipment
 - (1) Eye-hand coordination development; examples:
 - (a) Puzzles
 - (b) Toys
 - (c) Wind-up objects
 - (2) Manipulatory hand training equipment (toward self care); examples:

Montessori boards, etc.
 - (3) Physical therapy training equipment (for walking); examples
 - (a) Parallel bars
 - (b) Crutches

- (c) Skis
- (d) Tricycles
- (4) Recreational equipment facilities adapted to child's needs in relation to his handicap; examples:
 - (a) Swings
 - (b) Sandpiles
 - (c) Wading pools
 - (d) Wagons
 - (e) Wheeled toys
- (5) Arts and crafts equipment for program requirements; examples:
 - (a) Moulding
 - (b) Building
 - (c) Painting
- (6) Developmental speech equipment; examples:
 - (a) Tape recorder
 - (b) Mirrors
- (7) Adequate facilities for testing

III. Specialized Facilities

A. Observation and student teaching opportunities on the elementary and secondary levels

1. Special schools -- local, county, area
2. Special classes in regular schools
3. Diagnostic and research centers
4. Residential schools

- a. Hospital
- b. Convalescent

B. Clinics

1. For observation



2. Individual clinical, educational and therapeutic treatment

C. Adequate facilities for testing

Room adequate for testing child with multiple handicaps

D. Special cooperating institutions and/or agencies on developmental level basis--nursery through secondary

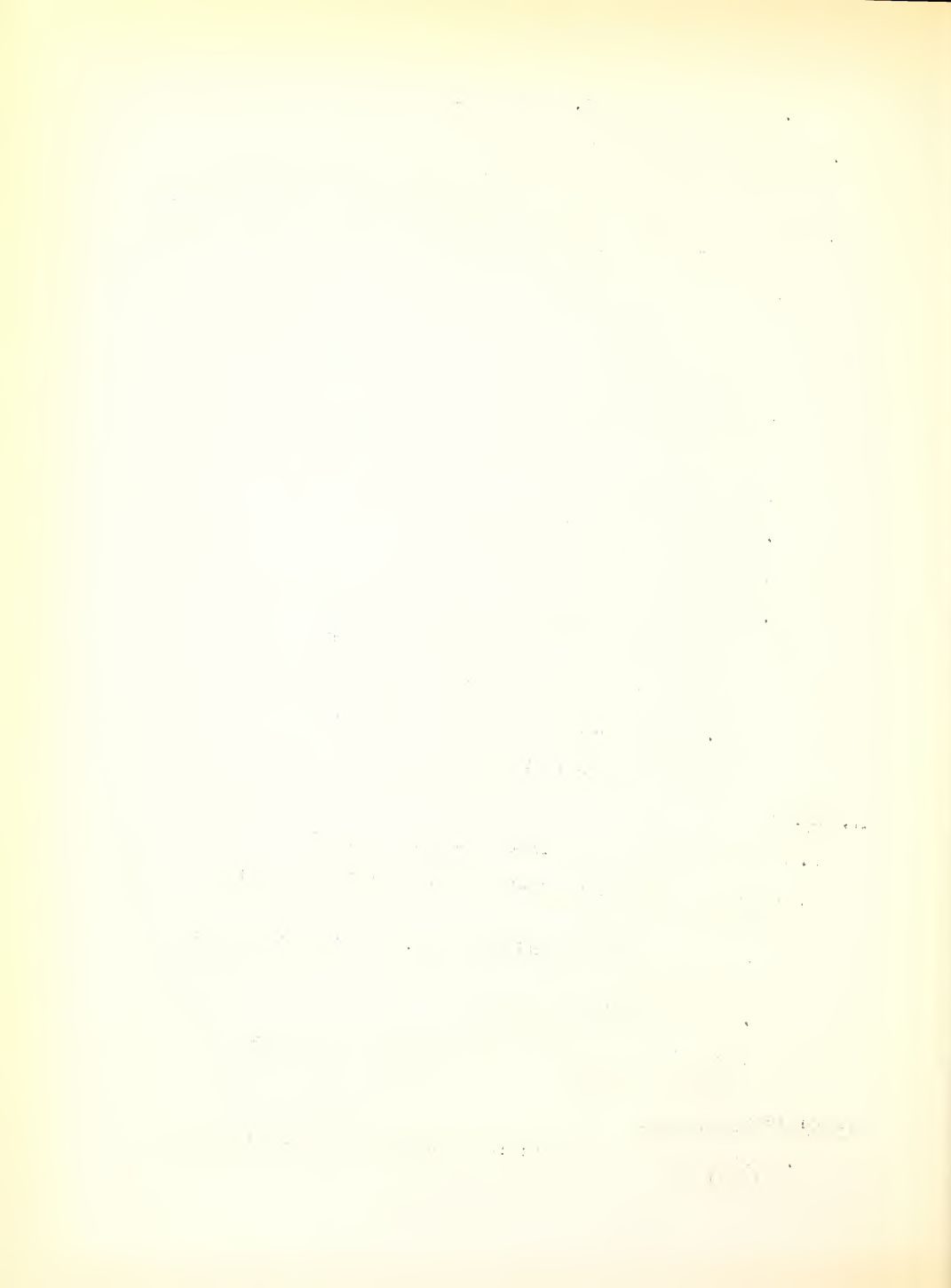
1. Day classes--integrated
2. Hospital schools
3. Convalescent homes
4. Residential schools
5. Clinics
6. Parent groups
7. Community sheltered workshops
8. Diagnostic centers
9. Vocational rehabilitation agency
10. Special interest agency affiliations and foundations
 - a. National Foundation for Infantile Paralysis
 - b. National Society for Crippled Children
 - c. National Cerebral Palsy Association

IV. Library

- A. Adequate library in the field of general education
- B. Specialized library facilities should contain bound volumes which include:
 1. Medical and therapeutic journals, monographs and books in the field
 2. Speech training materials
 3. Materials appropriate to the problems of each type of exceptional child

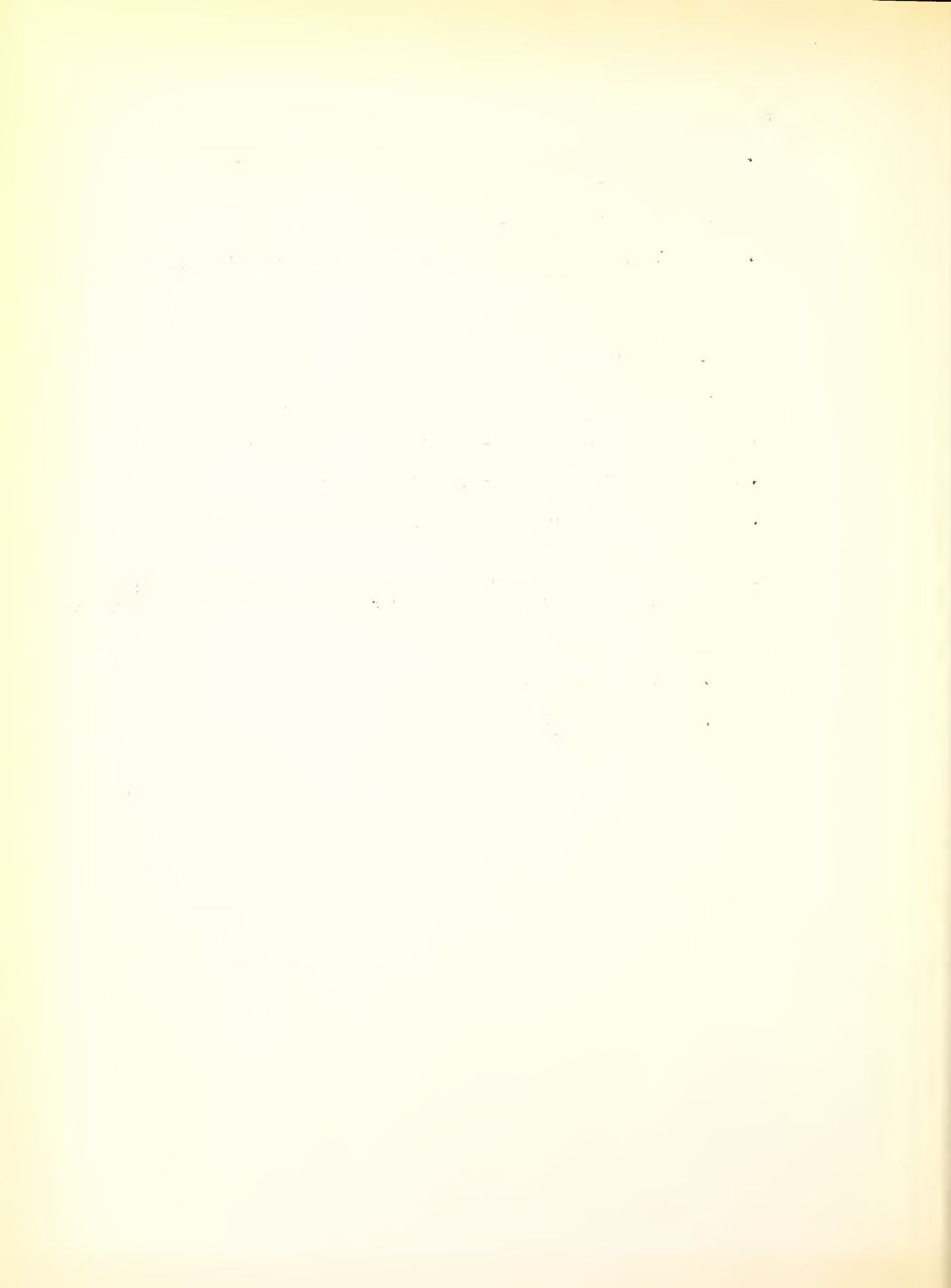
V. Curriculum Offerings

- A. Accredited program for general elementary and general secondary credentials



B. Area offerings

1. Broad general background of types of exceptional children and the educational needs of each type
2. Survey studies of children who are physically handicapped
3. Specialized study of particular needs of children in each of the following groups
 - a. Orthopedically handicapped
 - b. The cerebral palsied
 - c. Children who have special health problems
4. Methods of teaching physically handicapped children
5. Practice teaching opportunities in special area
6. Special work concerning the needs of children with multiple or overlaid handicaps
7. Courses dealing with recreational and esthetic activities for the physically handicapped on their respective levels of competency
 - a. Arts and crafts
 - b. Music and rhythms
 - c. Games and hobbies



IV

EXISTING SPECIAL EDUCATION PROGRAMS IN CALIFORNIA COLLEGES
AND UNIVERSITIESOver-all Picture of the Areas Served

Since the fifteen colleges and universities--including all nine state colleges--which supplied requested information for this study provide the substantial majority of teacher training opportunities in special education, the information tabulated herein should be sufficient, for most practical purposes, to afford an indicative over-all picture of the special education teacher training situation in the state.

Variance in programs

This survey indicates considerable variance among California colleges and universities in their teacher training programs for special education--insofar as the extent of such programs is concerned. While Table II shows that teacher training is being offered in all areas of special education included in this study and, in addition, that supervisory and administrative training for work with exceptional children is being offered quite generally, it should be understood that these offerings range in scope from a single course to a sequence of courses which exceeds the minimum state requirements for a credential in a given field. A detailed account of this course variance as it exists within and among the various areas of specialization both within and among the several institutions reporting may be found in Table III. In considering such factors as monetary expenditures, building construction, equipment and supplies, laboratory facilities and library resources, professional staffs, student teaching facilities, related agencies utilized, etc. further diversity is found to exist; an analysis of Tables IV through IX clearly illustrates this situation.

Program development

It is significantly reflected in the findings of this survey that a marked increase of interest in the education of exceptional children and a greatly accelerated over-all teacher training program in special education has occurred since the study of the California Congress of Parents and Teachers in 1945-46. Although the enactment of special education legislation provided the needed impetus for an expanding state-wide program of teacher training in various areas of special services, an analysis of the data accumulated for this report supports the hypothesis that this expansion is continuing as an outcome of the reciprocal effect of constructive planning by teacher training institutions and the rising tide of public consciousness for the educational welfare of exceptional children. Evidence of the continuing growth in this program is suggested by the following findings: (1) numerous newly organized courses, curricular facilities, and teacher training opportunities in special education; and (2) several instances of proposed or tentatively organized course additions and/or supplementary program features which have not as yet been placed in actual operation. Because of its tentative nature this latter type of information has been omitted from the data tabulated for this report,

Status of teacher education programs

As in the 1945-46 study of the California Congress of Parents and Teachers teacher education programs in speech correction are the most widely offered. Sixteen colleges and universities reported courses in this area; twelve of these offer credential accredited sequences. The greatest strides, however, have been accomplished in the area concerned with the mentally retarded; although only eleven institutions were reported as offering this preparation, by far the greatest number of teachers and teacher candidates were shown to be training in this area. In the area of the hard of hearing child courses are becoming more widely offered, but because of the limited vocational opportunities in the areas of the visually handicapped, the deaf and the orthopedically handicapped, work in these areas has been confined to the center at San Francisco State College and to a few scattered individual courses elsewhere. The data also indicate that teacher education for gifted children is practically untouched and that organized teacher education programs for emotionally disturbed and socially maladjusted children are just beginning. A representative sampling of individual courses that are currently being offered by California State Colleges is presented in the appendix to this report.

Training in administration and supervision

Table II shows that sixteen of the nineteen institutions offering teacher training in special education are accredited by the State Department of Education to recommend candidates for administrative credentials and that ten of the sixteen are further accredited to recommend candidates for special subject supervision credentials--relative to the area or areas of special education in which the institution concerned offers an accredited sequence.

Student enrollment

A study of Table III, concerned with the number of students enrolled in special education courses the last time these offerings were available, reveals that in most instances the enrollment figure factually substantiates the realistic point of view expressed in the Employment Needs section of this report--relative to the number of teachers currently being trained in the special areas. The fact that those preparing to teach exceptional children is insufficient to meet current and future demands, indicates that teacher recruitment procedures are not as effective as they might be.

Some delimitations

Several institutions in the study reported courses in counseling, guidance, mental hygiene, psychological testing, and allied subjects. Although such courses are integrally related to the education of exceptional children, data in this category was nevertheless omitted from tabulation because such courses actually come under the classifications of education and psychology rather than special education as a specific branch or specialized area. Again it should be noted that training programs for guidance workers and for school psychologists and psychometrists are not included in this study.

TABLE II

CALIFORNIA COLLEGES AND UNIVERSITIES OFFERING A SEQUENCE OF TRAINING IN ONE OR MORE FIELDS OF SPECIAL EDUCATION

Legend: S--indicates college offers necessary sequence of courses to qualify student for credential in special area concerned; C--indicates course or courses offered are less than a valid sequence; A--indicates college is accredited by State Board of Education to recommend student for credential in special field concerned.

COLLEGE OR UNIVERSITY	BLIND	PARTIALLY SIGHTED	DEAF	HARD OF HEARING	SPEECH CORRECTION	MENTALLY RETARDED	ORTHOPEDICALLY HANDICAPPED*	GIFTED	OTIONALLY & SOCIALLY MALADJUSTED	SPECIAL SUBJECT SUPERVISION	SCHOOL ADMINISTRATION
(c) STATE COLLEGES											
CHICO					C					S A	S A
FRESNO					S A					S A	S A
HUMBOLDT					S A					S A	S A
LONG BEACH						C					S A
LOS ANGELES			C	C	C	C					
SACRAMENTO					C	C		C			S A
SAN DIEGO			C	C	S A	S A			C	S A	S A
SAN FRANCISCO	S A	S A	S A	S A	S A	S A	S**		S**	S A	S A
SAN JOSE					S A	S A	S ***			S A	S A

* Includes the Cerebral Palsied ***Sequence in Occupational Therapy.

** No credential authorized in this field.



TABLE II(continued)

CALIFORNIA COLLEGES AND UNIVERSITIES OFFERING A SEQUENCE OF TRAINING IN ONE OR MORE FIELDS OF SPECIAL EDUCATION

Legend: S--indicates college offers necessary sequence of courses to qualify student for credential in special area concerned; C--indicates course or courses offered are less than a valid sequence; A--indicates college is accredited by State Board of Education to recommend student for credential in special field concerned.

COLLEGE OR UNIVERSITY	BLIND	PARTIALLY SIGHTED	DEAF	HARD OF HEARING	SPEECH CORRECTION	MENTALLY RETARDED	ORTHOPE- DICALY HANDI- CAPPED*	GIFTED	EMOTION- ALLY & SOCIALLY MALAD- JUSTED	SPECIAL SUBJECT SUPER- VISION	SCHOOL ADMINIS- TRATION
(b) OTHER COLLEGES											
CLAREMONT						S A				S A	S A
COLLEGE OF PACIFIC				C	S A	S A				S A	S A
OCCIDENTAL					S A						
RELANDS					C	C					S A
SOUTHERN CALIFORNIA			C	C	S A	S A				S A	S A
STANFORD					S A						S A
U. C. (Berkeley)					C	C					S A
U. C. (Los Angeles)					S A	S A	C			S A	S A

* Includes the Cerebral Palsied

TABLE II(continued)

CALIFORNIA COLLEGES AND UNIVERSITIES OFFERING A SEQUENCE OF TRAINING IN ONE OR MORE FIELDS OF SPECIAL EDUCATION

Legend: S--indicates college offers necessary sequence of courses to qualify student for credential in special area concerned; C--indicates course or courses offered are less than a valid sequence; A--indicates college is accredited by State Board of Education to recommend student for credential in special field concerned.

COLLEGE OR UNIVERSITY	BLIND	PARTIALLY SIGHTED	DEAF	HARD OF HEARING	SPEECH CORRECTION	MENTALLY RETARDED	ORTHOPE- DICALLY HANDI- CAPPED*	GIFTED	EMOTION- ALLY & SOCIALLY MALAD- JUSTED	SPECIAL SUBJECT SUPER- VISION	SCHOOL ADMINIS- TRATION
(b) OTHER COLLEGES											
U. C. (Santa Barbara)					S A					S A	S A
WHITTIER					S A						

* Includes the Cerebral Palsied



Programs in California State Colleges

Chico State College

Curriculum offerings: Special education courses are required in the following curricula: (1) Speech Correction and (2) Counseling and Guidance. These courses are also recommended as electives in the following curricula: (1) General Elementary Teacher Training and (2) A.B. in Speech Arts. In addition, course requirements are offered for credential qualification in Elementary School Administration.

Major and minor programs. On both the graduate and undergraduate levels Speech Correction is offered as a curriculum minor; work in this area may also serve as a graduate major. An undergraduate minor in the area of the hard of hearing offers another possibility.

Course offerings include four upper division courses in speech correction plus one upper division-graduate level survey course dealing with the exceptional child. These courses are given during regular semesters. Statistics concerning courses which were part of the curricular offerings at the time of this report may be found in Table III.

Related courses which are closely allied to the special education program of this college include several offerings in the field of counseling and guidance and psychometry. Also offered are full programs for credential recommendation on the following levels: Kindergarten-Primary, General Elementary and Junior High School.

Professional staff includes two assistant professors (M.A.) part time in the area of speech and hearing; one associate professor (Ph.D.) part time in the area of counseling and guidance; one associate professor (M.A.) part time in the area of remedial subjects. All teaching personnel are reported to have had specialized training in their respective fields and work experience with handicapped children.

Materials and equipment. A substantial inventory of equipment items, training aids, testing materials, clinical facilities, and demonstration classrooms was reported for the areas of speech correction, hard of hearing, and socio-emotionally maladjusted.

Specialized facilities. Opportunities for observation of children relative to the pertinent areas of specialization were reported to be partially adequate. Practice teaching arrangements on both elementary and secondary levels have been made. Clinical practice in speech correction and hearing is available. A laboratory elementary school on the college campus and the Chico Cerebral Palsied School are utilized in the training program.

Library. It was reported that there is a department library available and that the general library has adequate and suitable material for students' use in special education. Library resources in special education include the following totals: 659 book titles and 832 volumes, 32 journal titles, 50 miscellaneous materials, and 11 standard references.

An analysis of program costs reveals the following expenditures (through



the school year 1949-50):

Amount spent for equipment and library materials (initial outlay plus additions and replacements) plus building construction (including facilities planned with funds already appropriated by State Legislature) totals \$17,175.00.

Average annual expenditure for supplies is \$330.00.

Average per capita cost is \$452.37 for special education students as compared with per capita cost of \$531.00 for all students.

Fresno State College

Curriculum offerings. This college is accredited to recommend candidates for special secondary credentials in the Correction of Speech Defects; recommendation for special subject supervision credentials in this area is also authorized. In addition special education courses are required in the curricula offered for a Master of Arts degree in psychology. Special education courses are recommended as electives in the following curricula: (1) General Elementary School Credential, (2) General Secondary School Credential, (3) Special Secondary Credentials and (4) Administration and Supervision programs.

Major and minor programs. Special education is not offered as an undergraduate or graduate major or minor.

Course offerings include: one general upper division-graduate level survey course dealing with exceptional children and nine upper division-graduate level courses in speech correction. All of these offerings are available during the regular school year and some of them during summer and extension sessions as well. Statistics concerning courses which were part of the curricular offerings at the time of this report may be found in Table III.

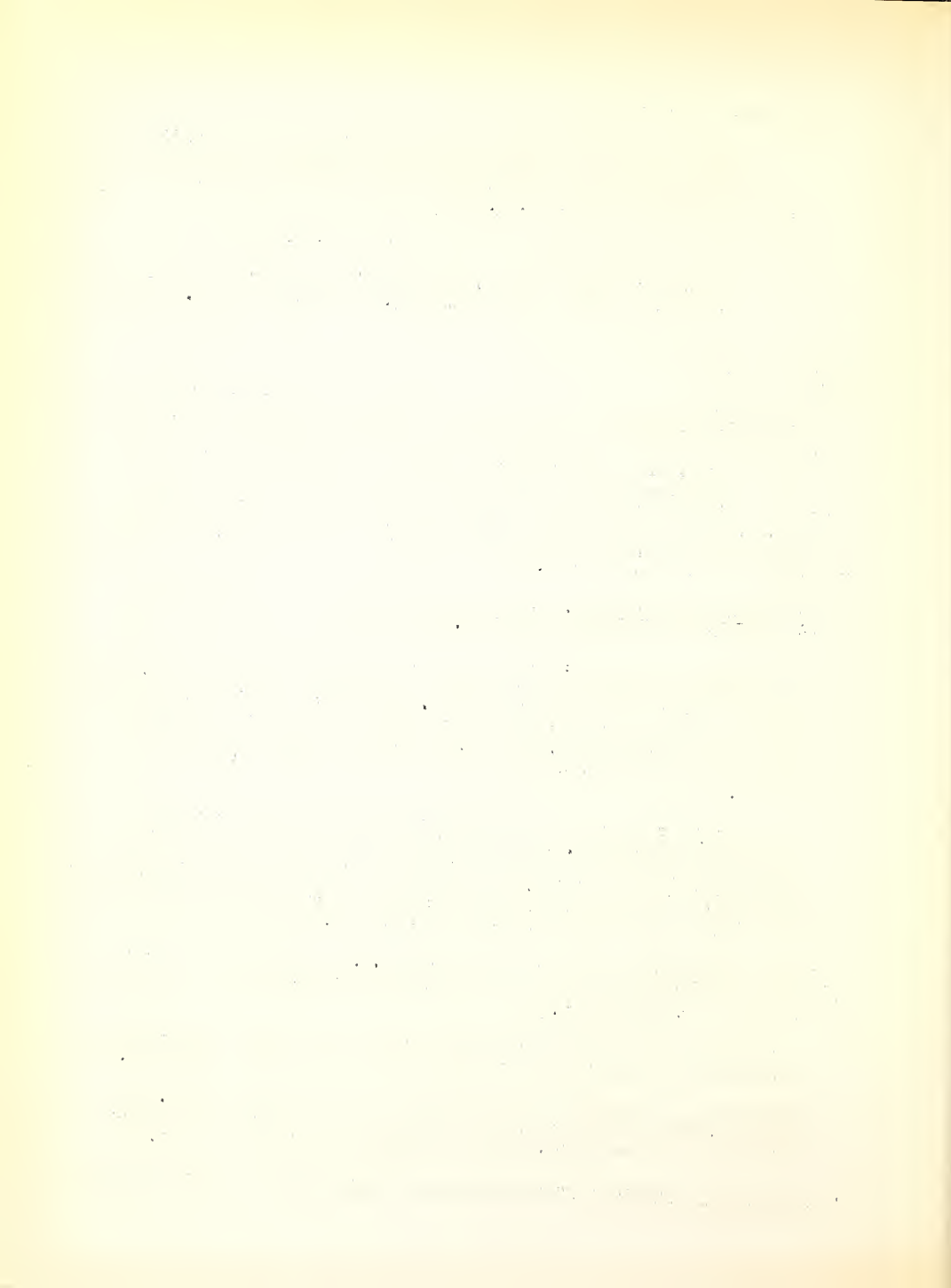
Related courses which are offered under the immediate direction of the Psychology Department--e.g. psychological testing and diagnosis and clinical psychology--are also utilized in the training program for special education students. In addition, full programs for credential recommendation on the following levels are offered: Kindergarten-Primary, General Elementary, Junior High School and General Secondary.

Professional staff includes. one professor (Ph.D.) part time in the area of mental retardation and two associate professors (M.A.) part time in the area of speech correction.

All teaching personnel are reported to have had specialized training in their respective fields and work experience with handicapped children.

Materials and equipment. A substantial inventory of equipment items, training aids, testing materials, and clinical facilities was reported for the areas of speech correction, hard of hearing and mentally retarded.

Specialized facilities. Opportunities for observation of children relative



to the area of speech correction were reported to be partially adequate. Clinical practice in speech correction is available. Practice teaching arrangements in speech correction on both elementary and secondary levels are in operation. Special classes in the Fresno City Schools and Fresno County Schools are utilized in the training program.

Library. It was reported that there is neither a department library available nor adequate and suitable material for students' use in special education. Library resources in special education include the following totals: 678 book titles and 1017 volumes, 43 journal titles, 60 miscellaneous materials, and 7 standard references.

An analysis of program costs reveals the following expenditures (through school year 1949-50):

Amount spent for equipment and library materials (initial outlay plus additions and replacements) totals \$2,434.45.

Average annual expenditure for supplies is \$50.00.

Average per capita cost is \$218.04 for special education students as compared with per capita cost of \$510.00 for all students,

Humboldt State College

Curriculum offerings. This college is accredited to recommend candidates for the Special Secondary Credential in the Correction of Speech Defects; recommendation for the special subject supervision credential in this area is also authorized. In addition, special education courses are recommended as electives in the following curricula: (1) General Elementary Credential, (2) A.B. in Speech-English, (3) major or minor in teaching speech, (4) General Secondary Credential with a speech major, (5) A.E. in Language Arts, and (6) Junior High School Credential with a speech major.

Major and minor programs. A special education minor in the area of speech correction is offered at both undergraduate and graduate levels. Majors in special education are not offered at this college.

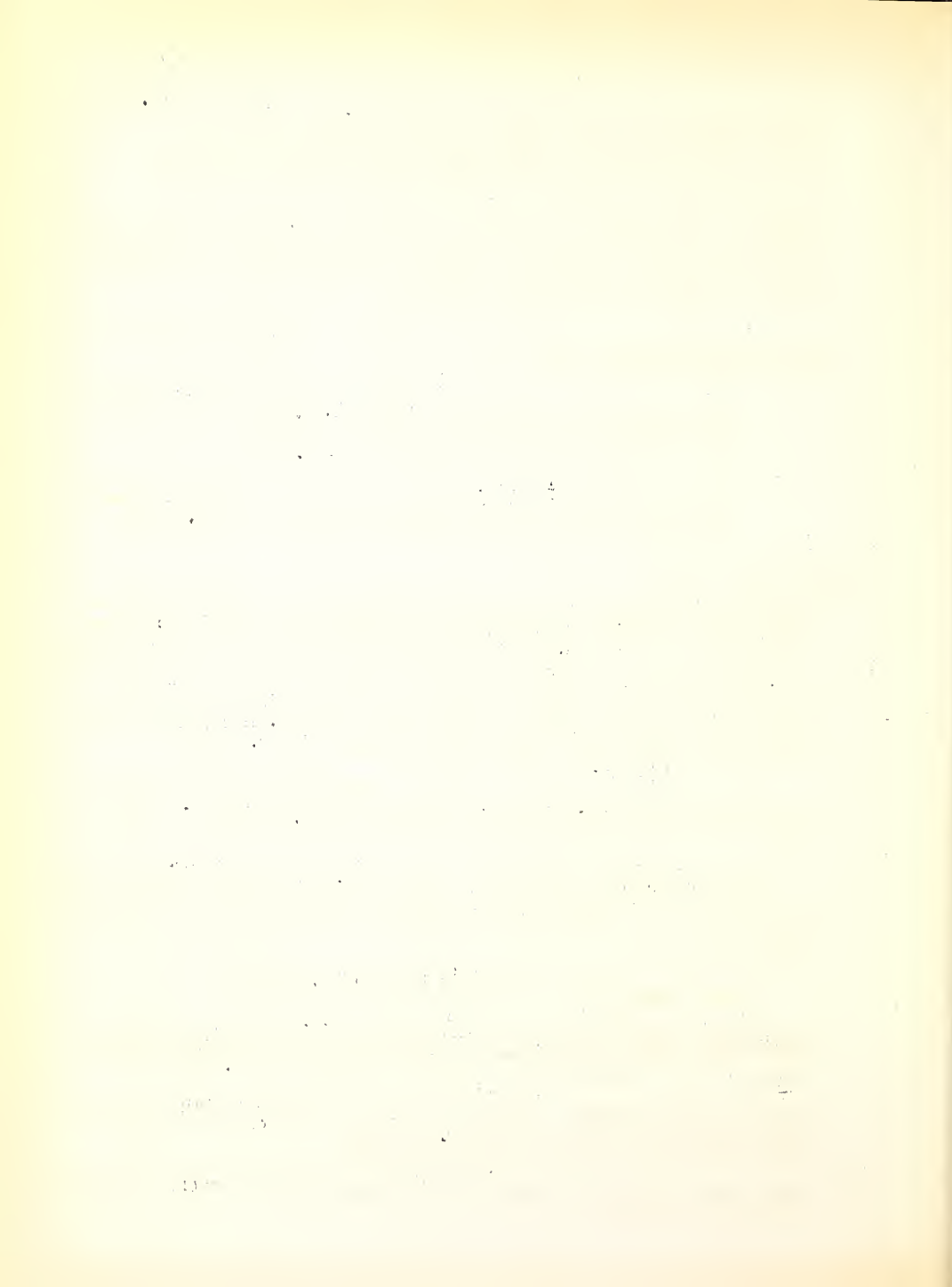
Course offerings include three upper division courses in speech correction, which are given during the regular school year. Since this college is accredited to recommend candidates for the special secondary credential in this area of specialization, the program is now in the process of being expanded.

Related courses were not reported by this institution.

Professional staff includes one associate professor (Ed.D.) part time in the area of speech correction. He is reported to have had specialized training in his field and work experience with handicapped children.

Materials and equipment. Limited inventories of equipment items, training aids, testing materials, and clinical facilities were reported for the areas of speech correction and hard of hearing.

Specialized facilities: Opportunities for observation of children relative



to the area of speech correction were reported to be partially adequate. Arrangements for practice teaching in the Eureka City Schools and the Humboldt County Schools are being made although this phase of the teacher training program in speech correction has not as yet been offered.

Library. Although there is no department library available for students use in special education, it was reported that the general library does have some adequate and suitable material in the field. Library resources in special education include the following totals: 279 book titles and 295 volumes, 21 journal titles, and 10 standard references.

An analysis of program costs reveals the following expenditures (through school year 1950-51):*

Amount spent for equipment and library materials (initial outlay plus additions and replacements) totals \$1,525.00.

Average annual expenditure for supplies is \$15.00.

Average per capita cost for special education students is \$355.00.

Long Beach State College

Curriculum offerings. This college reported that the development of its teacher training program in special education was as yet largely in the planning stage--primarily due to the recency of the institution's founding. Although special education courses are not yet required in any of the curricula offered, such courses are recommended as electives in the elementary education curriculum.

Major and minor programs. As yet special education is not offered as an undergraduate or graduate major or minor.

Course offerings include two upper division courses, one of which deals with the education of exceptional children and the other with curriculum and methods of teaching the mentally retarded. Both are offered during regular and summer sessions. For further information concerning these courses, see Table III.

Related courses. None were reported by this college.

Professional staff includes one assistant professor (M.A.) part time in the area of mental retardation. He has had specialized training in this field and work experience with handicapped children.

Materials and equipment. Inasmuch as the special education program is as yet undeveloped in this institution, such training aids as are needed are made available on a cooperative basis by the general education staff or other departments.

Specialized facilities. This feature of teacher training has not been

* All other state colleges in this survey reported on the basis of the 1949-50 school year as the terminal dates for purpose of these calculations.

developed as yet; however, it was stated that excellent potentialities for practice teaching and cooperative agency relationships exist in the Long Beach vicinity.

Library. Resources include the following totals: 300 book titles and 362 volumes; 35 journal titles, 16 miscellaneous materials and 6 standard references.

No analysis of program costs was submitted because of undeveloped program.

Los Angeles State College

Curriculum offerings. This college has just been accredited to recommend candidates for special secondary credentials in the Correction of Speech Defects and in Teaching the Mentally Retarded.* In addition, special education courses are required in the speech therapy curriculum and are recommended as electives in the general education curriculum.

Major and minor programs. On the undergraduate level no major is offered in special education, but minors are offered in speech correction and in the area of the mentally retarded. Minors in the areas of the partially sighted and the hard of hearing are being scheduled for the future and it was mentioned that this institution hopes to offer an undergraduate minor in the area of the deaf. It was reported that plans are being formulated to offer graduate major and minor programs in the following areas of specialization: speech correction, mentally retarded, blind, partially sighted, deaf, hard of hearing, and the general field of special education.

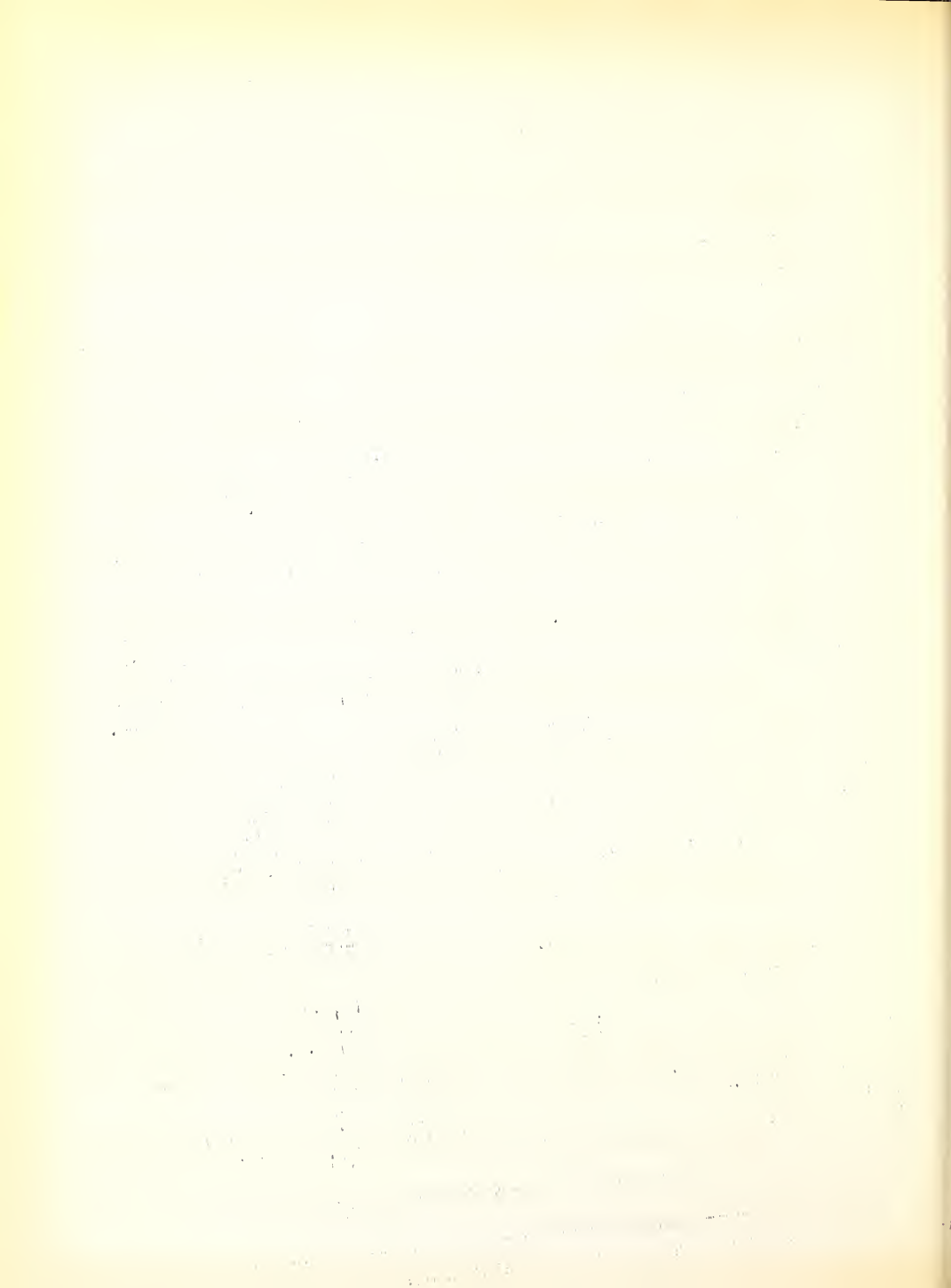
Course offerings include one general upper division-graduate level course dealing with the education of exceptional children; four upper division-graduate level courses in the area of the acoustically handicapped; three upper division courses in the area of speech correction; and two upper division-graduate level courses in the area of the mentally retarded. Most of these courses are offered during regular and summer sessions; in addition, some are given in the late afternoon or evening. A more detailed account of these curricular offerings is presented in Table III.

Related courses are available in the programs offered for credential recommendation on the following levels: Kindergarten-Primary, General Elementary, and Junior High School.

Professional staff includes one associate professor (Ph.D.) whose areas of specialization are hearing and vision and who is serving full time as Director of Special Education; one assistant professor (Ph.D.) full time in the area of speech correction; one assistant professor (Ph.D.) part time in the areas of the partially sighted, deaf, and mentally retarded; one assistant professor (M.A.) part time in the area of the deaf; one assistant professor (M.A.) part time in the areas of the cerebral palsied, mentally retarded, and gifted; two assistant professors (M.A. and A.B.) part time in the area of the mentally retarded.

All teaching personnel are reported to have had specialized training

* This accreditation becomes effective with the 1951 Summer Session.



in their respective fields and work experience with handicapped children.

Materials and equipment. A comparatively small inventory has been acquired to date due to the fact that the special education program in this college is, for the most part, in the formulation stage at present. A number of equipment items and considerable training materials are co-operatively available from the general education program and from the facilities of Los Angeles City College, with whom this institution temporarily resides. Some items, including testing equipment, are available through the courtesy of the Los Angeles City Schools and from the Office of the Los Angeles County Superintendent of Schools.

Specialized facilities. It was reported that excellent opportunities for observation of children in various areas of special education exist in the vicinity and that these will be utilized.

To date there has been no directed teaching offered in the special areas, but it is the proposed plan that this type of training will be given in each area where the college is accredited to recommend for credentials. It was further reported that all facilities of the Los Angeles City Schools and those of various school districts in Los Angeles County have been made available for this purpose.

Contacts are currently being made with various special schools and agencies.

Library: It was reported that no department library is available for students' use in special education. Library resources in special education include the following totals: 377 book titles and 628 volumes, 33 journal titles, and 6 standard references. In addition the services of the Los Angeles City College Library are offered to State College students and faculty.

No analysis of program costs was submitted because data is unavailable at this time.

Sacramento State College

Curriculum offerings. This college was very recently founded and is consequently still engaged in the process of formulating and organizing a special education program for eventual teacher training accreditation.

Course offerings include one upper division general survey course in the field of exceptional children; four upper division courses in the area of speech correction; two courses in the area of the mentally retarded, both of which are upper division and one of which is also offered on the graduate level; and one upper division course in the area of gifted children. All of these courses are given during the regular school year, some of them also during summer and extension sessions. A more detailed account of these curricular offerings may be found in Table III.

Related courses which are offered under the immediate direction of the Psychology and Education Departments--e.g. psychological testing, mental hygiene, abnormal psychology, and educational counseling and guidance --are also utilized in the training program for special education students.

In addition, full programs for credential recommendations on the following levels are offered: Kindergarten-Primary, General Elementary, Junior High School, and General Secondary.

Professional staff includes: one professor (Ph.D.) and one assistant professor (M.A.), both of whom serve full time in the area of speech correction; one assistant professor (Ph.D.) and one instructor (Ph.D.), both of whom work part time in the area of psychometrics and counseling; one lecturer (M.A.) part time in the area of mental retardation and the gifted. All teaching personnel are reported to have had specialized training in their respective fields and work experience with handicapped children.

Materials and equipment: Limited inventories of equipment items, training aids, testing materials, and clinical facilities for teacher training in the areas of speech correction and mentally retarded was reported.

Specialized facilities. Extensive opportunities for observation of children relative to the pertinent areas of specialization were reported. Practice teaching which is conducted in the Sacramento City Schools and Sacramento County Schools is reported to be adequately meeting teacher training needs of this college in special education. In addition to the public schools three other institutions--including the State Home at Sonoma--cooperate with the college in terms of the clinical aspect of the special program.

Library. It was reported that there is a department library and that the college's general library possesses adequate and suitable material for students' use in special education. Library resources in special education include: 192 book titles and 218 volumes, 31 journal titles, 113 miscellaneous materials, and 9 standard references.

An analysis of program costs was not submitted because it was felt that insufficient data was available to render an accurate account.

San Diego State College

Curriculum offerings: This college is accredited to recommend candidates for special secondary credentials in the Correction of Speech Defects and in the Teaching of the Mentally Retarded; recommendation for special subject supervision credentials in these two areas is also authorized. In addition, special education courses are required in the following curricula: (1) School Psychometrist and (2) School Psychologist. Courses in special education are recommended as electives in the curriculum for general elementary education.

Major and minor programs on the graduate level are offered in the area of speech correction and also in the area of concentration for the Master of Arts degree.

Course offerings include. One upper division general survey course concerning the exceptional child; two upper division courses dealing with the acoustically handicapped; five upper division and/or graduate courses in the area of speech correction; one upper division and two upper division-graduate level courses in the area of the mentally retarded; and one upper

1. The first part of the paper is devoted to the study of the properties of the function $f(x)$ defined by the equation

$$f(x) = \int_0^x \frac{1}{1+t^2} dt, \quad (1)$$

where x is a real number. It is well known that this function is increasing and concave down on the interval $(-\infty, \infty)$.

2. In the second part, we consider the function $F(x)$ defined by the equation

$$F(x) = \int_0^x f(t) dt, \quad (2)$$

where x is a real number. It is well known that this function is increasing and concave up on the interval $(-\infty, \infty)$.

3. In the third part, we consider the function $G(x)$ defined by the equation

$$G(x) = \int_0^x F(t) dt, \quad (3)$$

where x is a real number. It is well known that this function is increasing and concave down on the interval $(-\infty, \infty)$.

4. In the fourth part, we consider the function $H(x)$ defined by the equation

$$H(x) = \int_0^x G(t) dt, \quad (4)$$

where x is a real number. It is well known that this function is increasing and concave up on the interval $(-\infty, \infty)$.

5. In the fifth part, we consider the function $I(x)$ defined by the equation

$$I(x) = \int_0^x H(t) dt, \quad (5)$$

where x is a real number. It is well known that this function is increasing and concave down on the interval $(-\infty, \infty)$.

division and two graduate courses concerning the problems of socially maladjusted children. All but one of these courses are offered during the regular school year, several are also offered during summer session and one is further offered on an extension basis. A more complete statistical account of these curricular offerings are presented in Table III.

Related courses which are offered under the immediate direction of the Education, Psychology and Sociology Departments--e.g. the guidance training program, clinical psychology and psychological testing and crime and delinquency--are also utilized in the training program for special education students. In addition, full programs for credential recommendation on the following levels are offered: Kindergarten-Primary, General Elementary, Junior High School and General Secondary.

Professional staff includes: One associate professor (Ph.D.) serving full time in the area of speech correction; two associate professors (M.A.) part time in the area of speech correction; one professor (Ph.D.) part time in the areas of mental retardation, the hard of hearing, and the socially maladjusted; one professor (Ph.D.) and one associate professor (Ph.D.) part time in the area of mental retardation; one assistant professor (Ph.D.) part time in the areas mental retardation and supervision of special education; one assistant professor (Ph.D.) part time in the area of the physically handicapped; and one assistant professor (Ph.D.) part time in the area of the emotionally maladjusted.

Materials and equipment: An extensive inventory of equipment items, training aids, testing materials, and clinical and demonstration facilities was reported for teacher training in the areas of speech correction the mentally retarded, the visually handicapped, the acoustically handicapped and the orthopedically handicapped.

Specialized facilities. It was reported that excellent opportunities for observation of most types of exceptional children exist in the vicinity and that the observation program is extensive and varied. Special classes in the San Diego City Schools and the San Diego County Schools are being utilized for teacher training in the following areas: the hard of hearing, the emotionally and socially maladjusted, the mentally retarded and the speech defective. There is also a laboratory elementary school in operation on the college campus. In addition, two other agencies in the community provide teacher training opportunities in the area of speech correction: (1) the Navy Hospital has several aphasia cases which require clinical study and therapy; and (2) an evening class of cerebral palsied children who have defective speech has been organized by an organization known as the Cerebral Palsy Youth Group.

Library. It was reported that a special section of the college general library has been set up for the Special Education Department and that adequate and suitable material is available for students' use. Library resources in special education include the following totals: 844 book titles and 1216 volumes; 52 journal titles; 15 standard references; and an extensive collection of pamphlets, courses of study, federal and state publications and other miscellaneous materials.

An analysis of program costs reveals the following expenditures (through

the school year 1949-50):

Amount spent for equipment and library materials (initial outlay plus additions and replacements) totals \$5,300.00.*

Average annual expenditure for supplies is \$480.00.

Average per capita cost is \$486.89** for special education students as compared with per capita cost of \$439.50 for all students.

San Francisco State College

Curriculum offerings. This college is accredited to recommend candidates for special secondary credentials in the following areas of specialization: (1) Teaching the Blind, (2) Teaching the Partially sighted, (3) Teaching the Deaf, (4) Teaching Lip Reading to the Hard of Hearing Child, (5) Correction of Speech Defects and (6) Teaching the Mentally Retarded Child. Recommendation for special subject supervision credentials in these six areas is also authorized. Although the State Department of Education has not as yet initiated a special credential requirement for teaching the orthopedically handicapped child, this college offers an extensive program in this area with special emphasis concerning the cerebral palsied. In addition, special education courses are required in the following curricula: (1) Speech and Language Arts, (2) School Psychometrist and (3) School Psychologist. In the following curricula special education courses are recommended as electives: (1) Physical Education, (2) Recreation, (3) General Elementary Credential programs, (4) General Secondary Credential programs, (5) both Elementary and Secondary Administrative Credential programs and (6) Student Personnel work.

Major and minor programs: Undergraduate majors in special education are offered in two areas, the blind and the deaf, whereas undergraduate special education minors may be programmed in any of the following areas: the blind, the partially sighted, the deaf, the hard of hearing, the speech defective, the mentally retarded and the physically handicapped. Graduate majors and minors are also offered in all of the above mentioned areas and in addition, in the administration and supervision of special education. Furthermore, for those students engaged in the college's cooperative internship teacher training program with the Californian Youth Authority there is offered an undergraduate minor and

* This figure does not include costs for building construction; it was reported that no special building facilities are provided at present.

** This figure represents the average per capita cost for students in Speech Correction and Mentally Retarded programs exclusively, as these were the only areas for which complete costs data were submitted.

a graduate major in the area of the socially and emotionally maladjusted.*

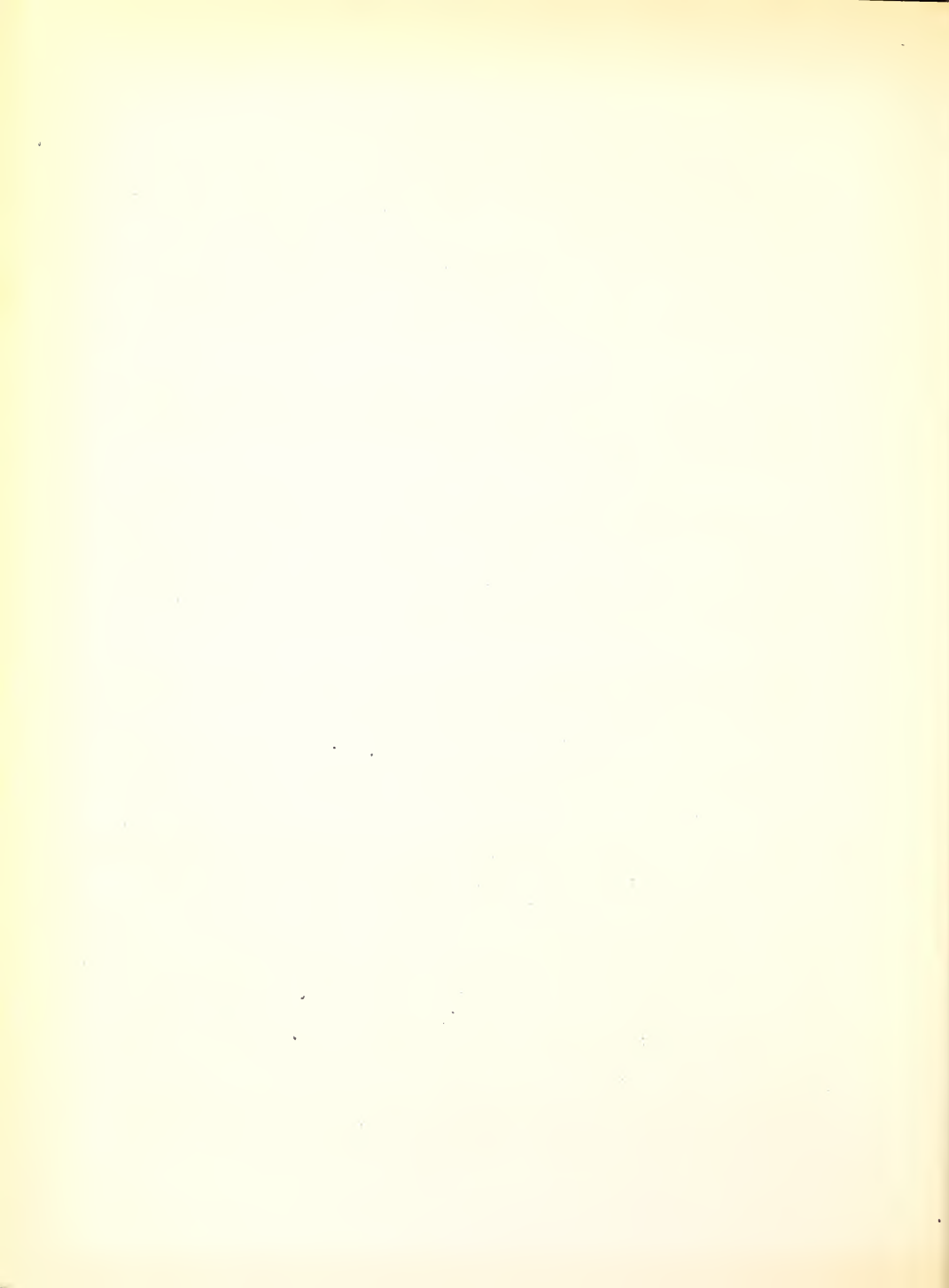
Course offerings include: Four graduate and three upper division-graduate survey or general courses in the field of special education; three graduate and eight upper division-graduate offerings in the area of the visually handicapped; three graduate and eleven upper division-graduate courses in the area of the acoustically handicapped; three graduate and five upper division-graduate courses in speech correction; four graduate and three upper division-graduate offerings in the area of the mentally retarded; and two graduate and three upper division-graduate courses concerned with the orthopedically handicapped including the cerebral palsied.

Thirty-six of the fifty-two course offerings are given both during regular and summer sessions. Twelve are offered only during regular terms and four only during summer session; two of the latter courses involve workshop programs. Six course offerings have been available on an extension basis.

Related courses which are offered under the immediate direction of the Education Psychology and Sociology Departments--e.g. psychological testing, counseling and guidance, mental hygiene, clinical and abnormal psychology and social case work--are also utilized in the training program for special education students. In addition, full programs for credential recommendation on the following levels are offered: Kindergarten-Primary, General Elementary, Junior High School and General Secondary.

Professional staff includes. One professor (Ph.D.) serving as Director of Special Education and specializing in the areas of mental retardation and administration; one associate professor (Ph.D.) in the area of speech correction; one assistant professor (Ed.D.) in the areas of mental retardation and emotional maladjustment; one assistant professor (M.S.) in the area of the visually handicapped; one assistant professor (M.A.) in the area of the acoustically handicapped; one assistant professor (M.A.) in the area of the orthopedically handicapped; and one instructor (M.A.) in

* The Cooperative Teacher Training Program with the California Youth Authority is a unique teacher education program conducted by San Francisco State College in conjunction with the C.Y.A. toward the goal of functionally training carefully selected upper division and graduate students who evidence promise of successful teaching in the area of the socially deviant and emotionally disturbed. Each participating student spends one semester as an educational intern at one of the C.Y.A. institutions. His work during the internship, for which he is paid \$170. per month, is supervised by the college in cooperation with the Youth Authority Staff. In this capacity he is responsible for: (1) giving directed individual and classroom instruction, (2) assisting in counseling children and youth, (3) doing routine psychological or other clinical work, (4) making studies and reports, (5) assisting in experimental psychological, educational, or recreational studies, (6) making social and economic background studies related to delinquency and crime, (7) assisting in the gathering of material for publication and (8) observing institution problems, methods and procedures.



the areas of the acoustically handicapped and speech correction. All teaching personnel are full time in special education. They are further reported to have had specialized training in their respective fields and work experience with handicapped children.

Materials and equipment: A very extensive and complete inventory of equipment items, training aids, testing materials, therapy devices and materials, clinical facilities and demonstration classrooms was reported for all areas in which this college specializes.

Specialized facilities. Opportunities for observation of various types of exceptional children were reported to be considerable in scope and very adequate for instructional purposes. A number of city and county school districts in the Bay Area cooperate with the college's teacher training program in special education by the provision of special class and special school facilities for the practice of teaching and supervision candidates and for the study and research of M.A. Degree candidates. Several highly specialized schools--such as the State Schools for the Blind and the Deaf (Berkeley), the Northern California School for Cerebral Palsied Children (Redwood City), and the Sonoma State Home for the Feeble-minded--are actively utilized in the training program. Numerous public and private community agencies which provide welfare services for the handicapped are used as consultant and/or clinical resources. Also assisting in the program is a laboratory elementary school located on the college campus. The California Youth Authority assists the College in cooperatively providing an internship teacher training program in the area of the socially and emotionally maladjusted.

Library: It was reported that there is a department library available and that the general library has adequate and suitable material for students' use in special education. Library resources in special education include the following totals: 845 book titles and 1421 volumes, 78 journal titles, 91 miscellaneous materials and 10 standard references.

An analysis of program costs reveals the following expenditures (through the school year 1949-50):

Amount spent for equipment and library materials (initial outlay plus additions and replacements) plus building construction (including facilities planned with funds already appropriated by State Legislature) totals \$1,018,878.00.

Average annual expenditure for supplies is \$1200.00.

Average per capita cost of \$473.20 for special education students as compared with per capita cost of \$427.00 for all students.

San Jose State College

Curriculum offerings: This college is accredited to recommend candidates for special secondary credentials in the Correction of Speech Defects and in the Teaching of the Mentally Retarded; recommendation for special subject supervision credentials in these two areas is also authorized. An extensive program in occupational therapy--leading to certification by the State Department of Health--is also offered. In addition, special



special education courses are required in the following curricula: (1) all programs for general teaching credentials, (2) special secondary credential program in Speech Arts and (3) Occupational Therapy program. Special education courses are recommended as electives in the following curricula: (1) all programs for teaching credentials, (2) Occupational Therapy, (3) Speech Arts, (4) Physical Education, (5) Recreation, (6) School Psychologist and (7) School Psychometrist.

Major and minor programs: Undergraduate majors are offered in the areas of the orthopedically handicapped--specifically in occupational therapy--and the mentally retarded. In the area of speech correction a graduate major and an undergraduate minor are offered.

Course offerings include: two upper division-graduate survey courses for student teachers dealing with the mentally and physically handicapped; one upper division and five upper division-graduate courses in the area of speech correction; three lower division and five upper division occupational therapy courses in the area of the orthopedically handicapped. All of these courses are offered during the regular school year; two of these are also available during summer session. Statistics concerning courses which were part of the curricular offerings at the time of this report may be found in Table III.

It was reported that San Jose State College is at present in the process of organizing a program for accreditation in the field of special education and that there are a number of courses specifically designed to meet credential requirements which will be offered during the 1951 Summer Session or during the following year; these include courses related to the education and vocational guidance of the handicapped and curriculum and methods of teaching the mentally retarded. Moreover, during the 1951 summer session a clinic for mentally retarded children will be held in connection with the remedial reading class.

Related courses which are offered under the immediate direction of the Education or Psychology Departments--e.g. psychological testing, mental hygiene, and guidance--are also utilized in the training program for special education students. In addition, full programs for credential recommendation on the following levels are offered: Kindergarten-Primary, General Elementary, Junior High School and General Secondary.

Professional staff includes: One professor (Ph.D.), two assistant professors (M.A.), and one instructor (M.A.)--all full time in the area of speech correction; one assistant professor (M.E.) full time in the area of mental retardation; one assistant professor (A.B.;OTR) full time in the occupational therapy phase of the orthopedically handicapped area; one special lecturer (OTR) full time in the general field of the handicapped and in the organization and administration of related services. All teaching personnel are reported to have had specialized training in their respective fields and work experience with handicapped children.

Materials and equipment: A substantial inventory of equipment items, training aids, testing devices and materials, clinical facilities and demonstration classrooms was reported for the area of speech correction, and it was further indicated that the occupational therapy program was very adequately equipped and supplied. The need of additional procurement

for the mentally retarded training program appears evident. A number of equipment items used in special education are available for loan from other departments in the college.

Specialized facilities: Opportunities for observation of children relative to the pertinent areas of specialization were reported to be partially adequate. Arrangements for student teaching and clinical practice, on both elementary and secondary school levels, have been made in cooperation with the San Jose City Schools and the Santa Clara County Schools. It was reported that an occupational therapy internship program is operating in cooperation with eight Northern California hospitals, agencies and services; internship experience of two or three months duration with the following types of patients is available: orthopedic (including post polio, cerebral palsied and industrial accident), rheumatic fever, tubercular, neuropsychiatric and general medical and surgical.

Library. It was reported that there is a department library available and that the general library has adequate and suitable material for students' use in special education. Library resources in special education include the following totals: 1270 book titles and 2148 volumes, 56 journal titles, 236 miscellaneous materials and 9 standard references.

An analysis of program costs reveals the following expenditures (through the school year 1949-50):

Amount spent for equipment and library materials (initial outlay plus additions and replacements) plus building construction (including facilities planned with funds already appropriated by State Legislature) totals \$35,200.00.

Average annual expenditure for supplies is \$500.00.

Average per capita cost is \$283.68 for special education students as compared with per capita cost of \$361.00 for all students.

Programs in Other Colleges and Universities

In addition to the nine state colleges just reported ten other institutions which offer programs designed to train teachers of exceptional children were included in this study in order to obtain a more complete state-wide picture of teacher education in this field. The latter universities and colleges were surveyed in terms of: (1) the areas of specialization in which teacher training was being offered, with an indication as to credential qualifying course sequences and accreditation by the State Board of Education; and (2) course offerings in the field of exceptional children. Further statistics relative to the following data are given in Tables II and III.

Special secondary credentials

Teacher training programs in special education have been accredited for credential recommendation in the following areas of specialization: (1) speech correction--at the College of the Pacific, Occidental College, Stanford University, the University of California at Los Angeles, the University of California at Santa Barbara, the University of Southern California, and Whittier College; and (2) mental retardation--at Claremont Graduate School, the College of the Pacific, the University of California at Los Angeles, and the University of Southern California.

Limited programs

Special education teacher training programs which are not as yet accredited for credential recommendation are offered in the following areas of specialization: (1) the deaf--at the University of Southern California; (2) the hard of hearing--at the College of the Pacific and the University of Southern California; (3) speech correction--at Redlands University and the University of California; (4) mental retardation--at Redlands University and the University of California; and (5) the physically handicapped--at the University of California at Los Angeles.

Special subject supervision credentials

The following institutions have been accredited to recommend candidates for special subject supervision credentials: Claremont College in the area of the mentally retarded; the College of the Pacific in the areas of speech correction and the mentally retarded; Occidental College in speech correction; the University of California at Los Angeles in the areas of speech correction and the mentally retarded; the University of California at Santa Barbara in speech correction; and the University of Southern California in the areas of speech correction and the mentally retarded.

TABLE III

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMI-STER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
(a) State Colleges							
CHICO	GENERAL	Psy.103 Psych. of the Exceptional child	2	UD & G	R	26	P
	SPEECH CORRECTION	Sp.130AB Speech Correction	4	UD	R	13	P
		Sp.131AB Clin. Practice	2	UD	R	10	P
		Sp.133 Seminar in Speech Ed.	2	UD	R	8	P
		Sp.135 Speech Lab.	4	UD	R	4	P
FRESNO	GENERAL	Ed.115 Psych & Education of Exceptional Children	3	UD & G	R & S	33	P
	SPEECH CORRECTION	Sp.120 Survey of Methods of Speech Correction	2-3	UD	R	29	P
		Sp.121a Methods in Correction of Spch.Defects	2-3	UD	R, S, & Ext.	22	P
		Sp.121b Methods in Correction of Spch.Defects	2-3	UD	R & Ext.	5	P
		Sp.123a Methods Correction Speech Disorders	2-3	UD	R, S, & Ext.	15	P
		Sp.123b Methods Correction Speech Disorders	2-3	UD	R & S	6	P
		Sp.127 Clin. Practice in Speech Correction	2	UD & G	R & S	3	P
		Sp.223 Seminar in Speech Pathology	2-3	G	R	2	P

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SERIES- TER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (last time course was offered)	FULL OR PART TIME INSTRUC- TOR
FRESNO (continued)	SPEECH CORRECTION	Sp.290 Spec. Projects	1-5	G	R	1	P
		Ed.132 Directed Teaching	2-4	UD & G	R	3	P
HUMBOLDT	SPEECH CORRECTION	Sp.170 Phonetics	3	UD	R	10	P
		Sp.180 Speech Correction	3	UD	R		P
LONG BEACH	GENERAL MENTALLY RETARDED	Sp.181 Adv. Speech Correction	3	UD	R	5	P
		Ed.168 Ed. of Exceptional	2	UD	R & S	27	P
		Ed.170 Curriculum and Meth. of Teach. Ment. Ret.	2	UD	R & S	22	P
		Ed.188 Psych. & Ed. of the Exception Child	2	UD & G	R, S & Eve.	53	P
LOS ANGELES	ACOUS- TICALLY HANDI- CAPPED	Ed.114 Teaching Speech to the Deaf		UD & G			P
		Ed.115 Special Methods of Teaching the Deaf		UD & G			P
		Ed.153A Audiometry	3	UD & G	R & S	13	P
		Ed.153B Audiology	3	UD & G	R & S	12	P
		Sp.131 Amer. Phonetics	2	UD	R		P
SACRAMENTO	SPEECH CORRECTION	Sp.134 Principles & Methods of Speech Therapy	3	UD	R	30	P
		Sp.135 Speech Pathology	3	UD			P
		Ed.106 Mental Deficiency	3	UD & G	Eve.	32	P
		Ed.169 Methods of Teaching the Mentally Retarded	2	UD & G	Eve.	43	P
SACRAMENTO	GENERAL	Psy.185 Psych of Ex. Child.	2	UD	R & Ext.	17	P

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMIESTER	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCT- ION
SACRAMENTO (continued)	SPEECH CORRECTION	Sp.111 Remedial Speech	2	UD	R	12	F
		Sp.117 Intro.to Spch Correc.	2	UD	R	25	F
	MENTALLY RETARDED	Sp.110 Speech Clinic	1-2	UD	R & S	12	F
		Sp.141 Clin.Prac. in Speech	2	UD	R & S	16	F
		Ed.134 Parallel Curriculum	1	UD & G	R		F
		Ed.141 Ed. & Trng of Slow Learning Children	2	UD		21	P
		Psy.166 Psych of Gifted Children	2	UD	R	8	P
	GENERAL EDUCATIONALLY HANDICAPPED	161 Exceptional Children	3	UD	R	36	F
		177 Teaching of Lip Reading	2	UD	R		P
		178 Prob.of the Hand of King	2	UD	R & S		P
SAN DIEGO	SPEECH CORRECTION	Sp.150 Phonetics	3	UD	R	20	F
		Sp.176 Prob.of Speech Correction & Articulation	3	UD & G	R & S	26	F
	MENTALLY RETARDED	Sp.179A Nervous Disorders of Speech	3	UD	R & S	18	F
		Sp.179B Nervous Disorders of Speech	3	UD	R & S	13	F
		Sp.221 Artic.Probs of Spch.	2	G	R	15	F
		114 Diag. & Remed.Trmt of difficulties in Reading	3	UD & G	R & S	42	F
		132 Cur. & Meth.for MR Child.	3	UD & G	R, S, & Ext	26	F
		183 Practicum for Teaching Ment.Ret.Children	3	UD	S	28	

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMI-STER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (last time course was offered)	FULL OR PART TIME INSTRUCTOR
SAN DIEGO (continued)	SOCIOALLY MALADJUSTED	Ed. 174 Juv. Delinquency	3	UD	R & S	52	P
		Ed. 230 Principles of Soc. Case Wk.	3	G	R		P
		Ed. 231 Fld. Wk. in Soc. Case Wk.	3	G	R		P
		Ed. 260.1 Ed. of Except. Child. of the Handicapped	2-3	UD & G	R & S & Ext	116	F
		Ed. 260.2 Adm. & Sup. of Sp. Ed.	2-3	G	R	57	F
SAN FRANCISCO	GENERAL	Ed. 260.3 Seminar in Sp. Ed. of Exceptional Children	3-6	G	R & S	44	F
		Ed. 160.2 Tchg. Arts & Crafts to the Handicapped	2-3	G	R & S	30	F
		Ed. 160.3 Prob. of Remed. Read.	2	UD & G	R & S	51	F
		Ed. 261.1 Physiology & Hygiene of the Eye	2	UD & G	R	35	F
		Ed. 261.2 Blind in Society	2	G	R	16	F
		Ed. 261.3 Adv. Prob. in Ed. of Visually Handicapped	2	G	R	14	F
		Ed. 161.1 Ed. of Children with Impaired vision	2	UD & G	R & S & Ext	9	F
		Ed. 161.2 Ed. of Children with Impaired vision	2	UD & G	R & S	9	F
		Ed. 161.3 Ed. & Methods of Tchng. the Blind	2	UD & G	R	7	F
		Ed. 161.4 Ed. & Methods of Tchng. the Blind	2	UD & G	R	7	F
VISUALLY HANDICAPPED		Ed. 161.5 Teaching of Braille	2	UD & G	R	11	F
		Ed. 161.6 Clin. Practice with Visually Handicapped	1-5	UD & G	R & S	9	F

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMESTER UNITS	LEVEL (Upper Div., Graduate or both.)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
SAN FRANCISCO (continued)	VISUALLY HANDICAPPED	Ed.121.1 Student Tchng in classes for Blind	1-5	UD & G	R & S	1	F
		Ed.121.5 Student Tchng in classes for Part.Sighted	1-5	UD & G	R & S	1	F
	ACOUS-TICALLY HANDI-CAPPED	Ed.262.1 Adv.Probs.in Lang. Development for Deaf	4	G	R	3	F
		Ed.262.2 Activity Pgm for Deaf	3	G	R & S	23	F
		Ed.162.1 Lang.Development & Reading for Deaf	4	UD & G	R & S	7	F
		Ed.162.2 Tchng.Elem.Sch.Subjs to the Deaf	2	UD & G	R & S	3	F
		Ed.162.3 Tchng.Elem.Sch.Subjs to the Deaf	2	UD & G	R & S	3	F
		Ed.162.4 Spch.Trng for Deaf	3	UD & G	R & S	3	F
		Ed.162.5 Spch.Trng for Deaf	3	UD & G	R	3	F
		Ed.162.6 Clin. Practice with the Deaf	1-5	UD & G	R & S	4	F
		Ed.163.1 Tchng Spch(lip)Reg. to Hrd of Hearing	2-3	UD & G	R & S & Ext	28	F
		Ed.163.2 Ed.Mtd Tchng Spch (lip) Heading to the Hrd of Hearing	2-3	UD & G	R & S - L&T	22	F
		Ed.163.3 Audiometric Testing & Hrng Conservation	3	UD & G	R & S & Ext	19	F
		Ed.263.1 Hrng Aids: Pncpls Tech. and Use	3	G	R & S	20	F
		Ed.163.4 Cntrl Practice with the Hrd of Hrng	1-5	UD & G	R & S	4	F

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMIESTER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
SAN FRANCISCO (continued)	ACOUS- TICALLY HANDI- CAPED SPEECH CORRECTION	Ed. 121.2 Student Tchng in classes for Deaf	1-5	UD & G	R & S	2	F
		Ed. 165.1 Better Speech for Glism Chld & Tchr.	2-3	UD & G	R & S & Ext	53	F
		Ed. 265.1 Speech Path.	2	G	R & S	7	F
		Ed. 265.2 Adv. Spch Correct.	2	G	R & S	7	F
		Ed. 265.3456 Clincl Practice in Speech Therapy	1-4	G	R & S	5	F
		Ed. 165.2 Spch Correctn, Basic Princpls & Technq.	2-3	UD & G	R & S & Ext	83	F
		Ed. 165.3456 Clincl Methods in Speech Therapy	1-2	UD & G	R & S	8	F
		Ed. 165.7 Stuttering & Allied Spch Disorders	2	UD & G	S	30	F
		Ed. 121.7 Student Tchng in Speech Correction	1-5	UD & G	R & S	10	F
		Ed. 266.1 Adv. Cur. Bldg. for the Ment. Retarded	2-3	G	R & S	48	F
		Ed. 266.2 Adv. Wrkshp in Spec. Ed.	3-6	G	S	38	F
		Ed. 266.3 Optnl Ed. for MR	2-3	G	R	15	F
		Ed. 266.4 Mental Deficiency	2-3	G	R & S	25	F
		Ed. 166.1 Cur & Methods of Tchng the Ment. Ret.	2-3	UD & G	R & S & Ext	131	F
		Ed. 166.2 Wrkshp in Spec. Ed.	3-6	UD & G	S	87	F
MENTALLY RETARDED		Ed. 121.4 Student Tchng in Classes for Ment. Ret.	1-5	UD & G	R & S	18	F

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMESTER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
SAN FRANCISCO	ORTHOPEDICALLY HANDICAPPED	Ed.264.1 Survey of Phys. Defects	3	G	R & S	25	F
		Ed.264.2 Adv. Prob. in Tchng the Cerebral Palsied	2-3	UD & G	R & S	12	F
		Ed.164.1 Methods of Tchng the Orthopedically Handcpd	3	UD & G	R	16	F
		Ed.164.2 Tchng Cer.Pal.Chilic	2-3	UD & G	R & S	15	F
		Ed.121.5 Student Tchng in Classes for Phys. Handcpd	1-6	G	R & S	3	F
		Psy.203 Psych & Tchng of Ment. & Phys. Handicapped	2	UD & G	R & S	20	F
SAN JOSE *	SPEECH CORRECTION	Ed.383 Readl.Spch for Clstrn Teacher	2	UD	R & S	29	F
		Sp.102A Remdl Speech	3	UD & G	R	21	F
		Sp.102B Remdl Speech	3	UD & G	R	16	F
		Sp.102C Remdl Speech	3	UD & G	R	18	F
		Sp.104A Adv. Remdl. Speech	2	UD & G	R	7	F
		Sp.104B Adv. Remdl. Speech & Clinical Practice	3	UD & G	R	7	F
SAN FRANCISCO	ORTHOPEDICALLY HANDICAPPED (Occupational Therapy Courses)	OT60A Crafts:Wood wrkg Area	3	LD	R	24	F
		OT60B Crafts: Hobby Area	3	LD	R	21	F
		OT60C Crafts: Graphic Arts, Mech Drawing Area	3	LD	R	24	F
		OT117 OT Theory	2	UD	R	43	F
		OT134ABC Medical Info.	11.5	UD	R	35	F
		OT 167A Adv. Of Theory	2	UD	R	35	F
		OT 167B Adv. Of Theory	2	UD	R		F
		OT 115ABC OT Lab.	3	UD	R	37	F

* Courses for this college reported in quarter units.

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMIESTER	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (last time course was offered)	FULL OR PART TIME INSTRUCTOR
(b) Other Colleges OF THE PACIFIC	GENERAL	SL34 Psych of the Exceptional Child.	2	UD & G	R & S	19	P
		ACOUS-TICALLY HANDI-CAPPED	2-3	G	S	11	F
		S207 Audiometry	2-4	G	S	10	P
		S208 Hearing Conservation	2	G	S	11	P
	SPEECH CORRECTION	SL61 Voice & Diction	2	UD	R & S	28	F
		SL62 Art of Interpretation	2	UD	R & S	33	F
		SL72 Phonetics	2	UD	R & S	22	F
		SL83 Clincl Lab in Spch Correcn	2	UD & G	R & S	18	F
	MENTALLY RETARDED	S201 Corrective Spch Technics	2	G	R & S	20	F
		S205 Clinical Methods	2	G	R & S	12	F
		S210 Speech Pathology	2	G	S	12	F
		SL86 Musical Theory Practicum	2	UD & G	R & S	10	P
OCCIDENTAL U.C. (Berkeley)	SPEECH CORRECTION	SL57 Dir. Tching of M.R. Child.	2-4	UD & G	R	4	P
		SL72 Reading Clinic Practice	2-3	UD & G	S	20	P
		S238 Cor. for the M.R.	2	G	R & S	10	P
		103 Speech Correction	3	UD	R	8	P
	GENERAL	105-106 Speech Clinic	1	UD	R	6	P
		126 Pract. Tching. in Speech Correction	2-4	UD	R		P
		201 Spch. Theory & Theory	4	G	R	4	P
		116 The Exceptionl Child	2	UD & G	R & S	40	P
	SPEECH CORRECTION	370 Basic Spch. Development	2		R	4	P
		394 Speech Disorders	2		S	21	P
		394F Adv. Prop. in Speech Disorders	2		S	15	P

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SEMESTER	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
U.C. (Berkeley)	SPEECH CORRECTION	394S Clincl. Practice in Speech Therapy	2		S	9	P
		395 Eng. Phonetics with Sp. Ref. to Speech Improvmt	2		S	27	P
		395P Phonetics Appl. to Corrcctn of Articulatory Defects	2		S	10	P
		127 Principles of Teaching the Slow Learner	2	UD & G	R & S	34	P
		Ed. 116 Ed. of Exceptional Children	3	UD	S	77	P
U.C.L.A.	SPEECH CORRECTION	Psy 169 Psych of Phys Handicapped	2	UD	R & S		
		Sp 110 Principles of Speech Correction	3	UD	R & S		P
		Sp 124 Clincl Methods of Speech Correction	2	UD	R & S		P
		Sp 128 Clincl Methods of Speech Correction	2	UD	R & S		P
		Ed SC376 Suprsd Tchng: Speech Correction	2-4	Professional	R	5	P
UNIV. OF SOUTHERN CALIFORNIA	MENTALLY RETARDED	Sp 34 Basic Voice Trng	3	ID	R & S		P
		Psy 160 Mental Deficiency	2	UD	R		P
		Ed 135 Our & Methods of Teaching the M.R.	3	UD	S		P
		Ed WR376 Suprsd Tchng: M.R. Children	2-4	Professional	R	15	P
		Ed 1a 393 Handicraft for the Elem. Tchrs.	2	UD	S & Ext	108	P
	GENERAL	Ed Ps 119 Educ of Exceptional Children	3	UD & G	R, S & Ext	141	P

TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SERIES- PER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUC- TOR
UNIV. OF SOUTHERN CALIFOR- NIA	GENERAL EDUCATION HANDI- CAPPED	Psy 352 Excpnl. Children	3	UD	S & Ext	52	P
		Ed EL 433 Educ. of the Deaf Pre-school Child	2	UD & G	R & S	11	P
		Ed TT 450a Meth. & Dir. Tchng of Hard of Hrng Child	2	UD & G	R & S	8	F
		Ed TT 458b Meth. & Dir. Tchng of Hard of Hrng Child	2	UD & G	R & S	6	P
		Ed TT 439a Meth. & Dir. Tchng of Hard of Hrng Adult.	2	UD & G	R & S		P
		Ed TT 459b Meth. & Dir. Tchng of Hard of Hrng Adult.	2	UD & G	R & S		P
		Spch 450 Awer. Phonetics	2	UD & G	R & S	26	P
		Spch 450 Intro. to Speech Correction	2	UD & G	R & S&Ext.		P
		Spch 462 Psych of Speech & Hearing	2	UD & G	R & S&Ext.	43	F
		Spch 473 Intro. to Aural Rehabilitation	2	UD & G	R & S&Ext.	33	F
RENEWALLY RETARDED		Spch 560 Adv. Spch Correction	2	UD & G	R & S	17	F
		Ed TT 487a Meth & Dir. Tchng in Corccta Spch Def.	2	G	R & S&Ext.	41	F
		Ed TT 487b Meth. & Dir. Tchng in Corccta Spch Def.	2	UD & G	R & S	6	F
		Ed EL 429 Corrective Reading	2	UD & G	R & S	8	F
		Ed EL 430 Corrective Reading Lab.	2	UD & G	R & S&Ext.	20	P
		Ed EL 483 Meth of Tchng the M.R. Child	2	UD & G	R & S	11	P
			3	UD & G	R & S	19	P



TABLE III (continued)

COURSE OFFERINGS IN THE FIELD OF EXCEPTIONAL CHILDREN

COLLEGE OR UNIVERSITY	AREA OF SPECIALIZATION	NUMBER AND TITLE OF COURSE	SERIES-INTER UNITS	LEVEL (Upper Div., Graduate or both)	WHEN OFFERED (Reg., Summer, Extension or other)	NUMBER OF STUDENTS (Last time course was offered)	FULL OR PART TIME INSTRUCTOR
UNIV. OF SOUTHERN CALIFORNIA	MENTALLY RETARDED	Ed TT 186 Dir. Tching of the M.R. Child	3	UD & G	R	2	F
		Psy.176 The Exceptional Child	3	UD & G	R & S	8	F
REDLANDS	GENERAL SPEECH CORRECTION	Sp.133 Speech Defects	2	LD	R	22	F
		Sp.131 Speech Correction	2	UD	R	39	F
		Sp.183 Prob. of Spch Crctn	3	UD	R	17	F
		Sp.185 Clincl Aspects of Speech	2-4	UD	R	22	F
MENTALLY RETARDED		Ed.194 Cur. Meth. of Tching M.R. Children	2	UD	S	18	F
		Art95 Industrial Arts	2	LD	R	24	F

TABLE IV

COSTS FOR EQUIPMENT, SUPPLIES, LIBRARY MATERIALS, BUILDING CONSTRUCTION

ITEM	COLLEGE	BLIND	PARTIALLY SIGHTED	DEAF	HARD OF HEARING	SPEECH CORRECTION	MENTALLY RETARDED	ORTHOPEDICALLY HANDICAPPED	SOCIALLY MALADJUSTED	TOTALS
(a) EQUIPMENT	CHICO				\$1,000.	\$1,000.			\$1,500.	\$3,500.00
Initial outlay through 1948	FRESNO					\$1,567.15				\$1,567.15
plus	HUMBOLDT**					\$1,190.				\$1,190.00
additions and	LONG BEACH**									
replacements	LOS ANGELES**									
1949 - 1950	SACRAMENTO**									
	SAN DIEGO	\$550.			\$1,050.	\$2,200.	\$1,200.		\$300.	\$5,300.00
	SAN FRANCISCO	\$2,876.	\$1,393.	\$2,488.	\$3,680.	\$2,931.	\$1,393.	\$1,717.		\$10,978.00
	SAN JOSE				\$650.	\$2,100.		\$1,900.***		\$4,950.00
(b) SUPPLIES	CHICO				\$30.	\$150.			\$150.	\$330.00
Average annual	FRESNO					\$50.				\$50.00
Expenditures	HUMBOLDT**					\$15.				\$15.00
	LONG BEACH**									
	LOS ANGELES**									
	SACRAMENTO**									
	SAN DIEGO	\$40.			\$40.	\$80.	\$200.		\$120.	\$480.00
	SAN FRANCISCO	\$150.	\$150.	\$150.	\$150.	\$200.	\$200.	\$200.		\$1,200.00
	SAN JOSE				\$50.	\$300.		\$150.		\$500.00

* Figures submitted by this college are for school year 1950 - 1951

** No report submitted, or data unavailable.

*** Occupational therapy program.

TABLE IV (continued)

COSTS FOR EQUIPMENT, SUPPLIES, LIBRARY MATERIALS, BUILDING CONSTRUCTION

ITEM	COLLEGE	BLIND	PAR- TIAL- SIGHTED	DEAF	HARD OF HEARING	SPEECH CORREC- TION	MENTALLY RETARDED	ORTHOPEDICALLY HANDI- CAPPED	SOCIALLY MALAD- JUSTED	TOTALS
(c)	CHICO				\$75.	\$900.			\$700.	\$1675.00
LIBRARY	FRESNO					\$875.				\$875.00
MATERIALS	HUMBOLDT*					\$315.				\$315.00
initial outlay	LONG BEACH**									
through 1948	LOS ANGELES**									
plus	SACRAMENTO**									
additions and	SAN DIEGO	\$367.45			\$194.500	\$597.80	\$1357.30			\$5610.85
replacements	SAN FRANCISCO	\$1250.	\$950.	\$950.	\$1250.	\$1750.	\$1800.	\$1050.		\$9000.00
1949-1950	SAN JOSE				\$275.	\$475.		\$500.***		\$1250.00
(d)	CHICO									
BUILDING	FRESNO				\$2,000.	\$10,000.				\$12,000.00
CONSTRUCTION	HUMBOLDT*									
Present build-	LONG BEACH**									
ing facilities	LOS ANGELES**									
including those	SACRAMENTO**									
planned with	SAN DIEGO				\$53,200.00		\$23,500.	\$899,600.***		\$992,900.00
funds already	SAN FRANCISCO	\$16,600.00			\$4,000	\$25,000.				\$29,000.00
appropriated	SAN JOSE									
by legislature										

* Figures submitted by this college are for school year 1950 - 1951.

** No report submitted, or figures unavailable.

*** Occupational Therapy program.

****Includes appropriation for Northern California School for Cerebrally Palsied Children

TABLE V
PER CAPITA COST PER STUDENT IN VARIOUS AREAS OF SPECIAL EDUCATION 1949-1950

COLLEGE	ITEM	BLIND	PAR- TIAL- SIGHTED	DEAF	HEARING	CORREC- TION	MENTALLY RETARDED	ORTHOPEDICALLY HANDI- CAPED	SOCIALLY MALAD- JUSTED	AV. COST, SPEC EDUC STU.	PER CAPITA COST-ALL STUDENTS
CHICO	Full time stu- dent equivalents				7	16			17		
	Per Capita Cost				\$366.13	\$443.75			\$527.00	\$452.37	\$531.00
FRESNO	Full time stu- dent equivalents					10.3					
	Per Capita Cost					\$218.04				\$218.04	\$510.00
HUMBOLDT*	Full time stu- dent equivalents					2.46					
	Per Capita Cost					\$353.00				\$353.00	
LONG BEACH**	Full time stu- dent equivalents										
	Per Capita Cost										
LOS ANGELES***	Full time stu- dent equivalents										
	Per Capita Cost										
SACRAMENTO**	Full time stu- dent equivalents										
	Per Capita Cost										
SAN DIEGO	Full time stu- dent equivalents				5	6					
	Per Capita Cost				\$525.22	\$118.55				\$186.88	\$439.50
SAN FRANCISCO	Full time stu- dent equivalents	6	8	7	7	25	35	18			
	Per Capita Cost	\$724.79	\$540.34	\$520.10	\$516.53	\$323.64	\$277.27	\$101.24		\$473.20	\$427.00
SAN JOSE	Full time stu- dent equivalents				22			156***			
	Per Capita Cost				\$467.00			\$100.36		\$283.68	\$361.00

* Figures submitted by this college are for school year 1950-1951. ** Program not developed. *** No report submitted. **** Students taking Occupational Therapy courses.

Note: This table applicable to California State Colleges only.

TABLE VI

STAFF EMPLOYED IN VARIOUS AREAS OF SPECIAL EDUCATION DURING REGULAR ACADEMIC YEAR
(State Colleges only)

COLLEGE	STAFF MEMBER	ACA- DEMIC RANK	HIGH- EST DEGREE	FULL TIME	PART TIME*	CONCURRENT POSITION HELD	AREA OF SPECIAL- IZATION	SPECIALIZED TRAINING IN FIELD	WORK EXPERI- ENCE WITH HANDICAPPED
CHICO	Allan E. Forbes	Asst. Prof.	M.A.		10 hrs	Asst. Prof. Spch. Methods	Speech & Hearing	Yes	Yes
	Herman J. Peters	Assoc. Prof.	Ph.D.		6-7 hrs	Counselor	Counseling & Guidance	Yes	Yes
	Isa. D. Reed	Assoc.	M.A.		2-4 hrs	Assoc. Prof. of Psych	Remedial Subjects	Yes	Yes
	Garrett L. Starmer	Asst. Prof.	M.A.		3 hrs	Asst. Prof. of Speech	Speech & Hearing	Yes	Yes
FRESNO	Hilda O. Hendrickson	Assoc. Prof.	M.A.		2-6 hrs	Assoc. Prof. of Speech	Speech Correction	Yes	Yes
	J. Fred McGrew	Assoc. Prof.	M.A.		8 hrs	Assoc. Prof. of Speech	Speech Correction	Yes	Yes
	John J. Harton	Prof.	Ph.D.		3 hrs	Prof. of Ed.	Mentally Retarded	Yes	Yes
	Don W. Karshner	Assoc. Prof.	Ed.D.		3½ hrs	Assoc. Prof. of Speech & drama	Speech Correction	Yes	Yes
LONG BEACH	Clayton E. Shohorn	Asst. Prof.	M.A.		4 hrs	Sp. Cls Tchr L.A. City	Mentally Retarded	Yes	Yes

* Indicate number of semester hours taught each semester in special education courses.

TABLE VI (continued)

STAFF EMPLOYED IN VARIOUS AREAS OF SPECIAL EDUCATION DURING REGULAR ACADEMIC YEAR
(State Colleges only)

COLLEGE	STAFF MEMBER	ACA- DEMIC RANK	HIGH- EST DEGREE	FULL TIME	PART TIME*	CONCURRENT POSITION HELD	AREA OF SPECIAL- IZATION	SPECIALIZED TRAINING IN FIELD	WORK EXPERI- ENCE WITH HANDICAPPED
LOS ANGELES	Eardine J. Jones	Asst. Prof.	Ph.D.		2 hrs	Coord. Rsch. & Guid. L.A.	Sight Saving Deaf, Mentally Retarded	Yes	Yes
	Morris Val Jones	Asst. Prof.	Ph.D.	X			Speech Correction	Yes	Yes
	Anna Helen Kennedy	Assoc. Prof.	Ph.D.	X			Hearing & Vision	Yes	Yes
	Wilma Carol Schmalzried	Asst. Prof.	A.B.		2-4 hrs	Cur. Cons. L.A. City Sch	Mentally Retarded	Yes	Yes
	Thomas Wood Smith	Asst. Prof.	M.A.		4 hrs	Coord. Rsch & Guid. L.A. Co.	Mentally Retarded	Yes	Yes
	Evelyn M. Stahlem	Asst. Prof.	M.A.		2 hrs	Pr. Mary E. Bennet Sch. for Deaf	Deaf	Yes	Yes
SACRAMENTO	Gertrude Wood	Asst. Prof.	M.A.		2 hrs	Coord. Rsch. & Guid. L.A. Co.	Cerebral Palsied Mentally Retarded Gifted	Yes	Yes
	Lawrence M. Brammer	Asst. Prof.	Ph.D.		3 hrs	Chf. Coun. Sac. St. Col	Psycho- metrics	Yes	Yes

* Indicate number of semester hours taught each semester in special education courses.

TABLE VI (continued)
STAFF EMPLOYED IN VARIOUS AREAS OF SPECIAL EDUCATION DURING REGULAR ACADEMIC YEAR
(State Colleges only)

COLLEGE	STAFF MEMBER	ACA- DEMIC RANK	HIGH- EST DEGREE	FULL TIME	PART TIME*	CONCURRENT POSITION HELD	AREA OF SPECIAL- IZATION	SPECIALIZED TRAINING IN FIELD	WORK EXPERI- ENCE WITH HANDICAPPED
SACRAMENTO	Jessie L. Penton	Lect.	M.A.		8 hrs	None	Mentally Retarded & Gifted	Yes	Yes
	B. Geeting	Prof.	Ph.D.	X			Speech Correction	Yes	Yes
	Chas. V. Hume	Asst. Prof.	M.A.	X			Speech Correction	Yes	Yes
	James D. Lucas	Instr.	Ph.D.		6 hrs		Psycho- metrics	Yes	Yes
	Francis A. Ballantine	Asst. Prof.	Ph.D.		X		Mentally Retarded Supvsn of Sp. Ed.	Yes	Yes
SAN DIEGO	E. C. Deputy	Prof.	Ph.D.		X		Mentally Retarded	Yes	Yes
	Sue Earnest	Assoc. Prof.	Ph.D.	X			Speech Correction	Yes	Yes
	Oscar J. Kaplan	Assoc. Prof.	Ph.D.		X		Mentally Retarded	Yes	Yes
	Richard Madden	Prof.	Ph.D.		Occa- sional crse.	Dean of Ed.	Mentally Retarded Hd of King Soc. Haledj	Yes	Yes

* Indicate number of semester hours taught each semester in special education courses.

TABLE VI (continued)

STAFF EMPLOYED IN VARIOUS AREAS OF SPECIAL EDUCATION DURING REGULAR ACADEMIC YEAR
(State Colleges only)

COLLEGE	STAFF MEMBER	ACA- DEMIC RANK	HIGH- EST DEGREE	FULL TIME	PART TIME*	CONCURRENT POSITION HOLD	AREA OF SPECIAL- IZATION	SPECIALIZED TRAINING IN FIELD	WORK EXPERI- ENCE WITH HANDICAPPED
SAN DIEGO (continued)	David S. Milne	Assoc. Prof.	M.A.		6 hrs	Assoc. Prof. Speech	Speech Correction	Yes	Yes
	Paul Pfaff	Assoc. Prof.	M.A.		6 hrs	Assoc. Prof. Speech	Speech Correction	Yes	Yes
	Byron H. Van Roekel	Asst. Prof.	Ph.D.				Physically Handcpd	Yes	Yes
	Virginia Voeks	Asst.	Ph.D.			Asst. Prof. Psychology	Emot. Maladj.	Yes	Yes
SAN FRANCISCO	Mable A. Brem	Asst. Prof.	M.A.	X			Orthoped. Handcpd	Yes	Yes
	Leo F. Cain	Prof.	Ph.D.	X			Director, adm., Mentally Retarded	Yes	Yes
	Ferne H. Glasgow	Instr.	M.A.	X			Deaf & Speech Correction	Yes	Yes
	Florence G. Henderson	Asst. Prof.	M.S.	X			Blind & Partially Sighted	Yes	Yes
	Leon Lessers	Assoc. Prof.	Ph.D.	X			Speech Correction & Hrng	Yes	Yes

* Indicate number of semester hours taught each semester in special education courses

TABLE VI (continued)

STAFF EMPLOYED IN VARIOUS AREAS OF SPECIAL EDUCATION DURING REGULAR ACADEMIC YEAR

COLLEGE	STAFF MEMBER	ACA- DEMIC RANK	HIGH- EST DEGREE	(State Colleges only)			AREA OF SPECIAL- IZATION	SPECIALIZED TRAINING IN FIELD	WORK EXPERI- ENCE WITH HANDICAPPED
				FULL TIME	PART TIME*	CONCURRENT POSITION HELD			
SAN FRANCISCO	Priscilla Pittenger	Asst. Prof.	M.A.	X			Deaf & Hd of Hrng	Yes	Yes
	Jerome H. Rothstein	Asst. Prof.	Ed.D.	X			Mentally Retarded & Emot. Malad.	Yes	Yes
SAN JOSE	Mary D. Goff	Asst. Prof.	M.E.	X			Mentally Retarded	Yes	Yes
	Floyd Greenleaf	Instr.	M.A.	X			Speech Correction	Yes	Yes
	Margaret Letzter	Prof.	Ph.D.	X			Speech Correction	Yes	Yes
	Lary D. Booth	Asst. Prof.	AB; OTR	X			Orthoped. Handcpd	Yes	Yes
	Vivian Lang	Asst. Prof.	M.A.	X			Speech Correction	Yes	Yes
	Eleanor P. Mann	Spe- cial Lectr.	OTR	X			Admin. Gen. Fld of Handcpd	Yes	Yes
	Wilda M. Merritt	Asst. Prof.	M.A.	X			Speech Correction	Yes	Yes

* Indicate number of semester hours taught each semester in special education courses.

TABLE VII

STUDENT TEACHING FACILITIES IN SPECIAL EDUCATION OFFERED BY CALIFORNIA STATE COLLEGES

COLLEGE	SPECIAL FIELD	COURSE NUMBER	SERIES-TER UNITS	WHEN OFFERED *	NAME OF FACILITY	CLASSES AVAILABLE	DOES MASTER TECHR. HOLD EACH SEM. SPEC. CRED.? NARS PROV?	TECHR. HOLD TCHR. SEMI- FOR STU. TCHR. NARS PROV? CONFERENCES	HRS. PER SEM.
CHICO	Speech & Hearing	Sp. 131AB	2	R	Hamilton	9	Yes	No	120
	Hearing defects	Sp. 135AB	4	R	Elem. Sch.; ColSpch. Clinic; High Schs. in Area	16	No	Yes	110
	Emotionally & socially maladjusted	Ed 400	3-9	R					10
FRESNO	Speech	Ed 132	2-4	R	Fresno City Schools Fresno Co. Schools	flexible	Yes	No	18
HUMBOLDT	**								
LONG BEACH	***								
LOS ANGELES	***								
SACRAMENTO	Sp. Corr.	Sp. 400	6	R	Sec. City Schools	8	Yes	No	Daily Conf.
	Ment. Ret.	199E	4	R		1	No MstrTchr	No	16
SAN DIEGO	Hd. of Prog. & Emot & Soc. Malad.; Spch. Corr.; M.R.	Ed 116 & Ed 143	2-7	R	S.D. City Schools S.D. County Schools	50+	Yes	Individual conf. per student utilized	1 per week
	Spch. Corr.	Sp. 176	3	R & S			Yes	Yes	90
SAN FRANCISCO	Blind	Ed. 121.1	1-5	R & S	State Sch. for Blind (Berkeley)	8	Yes	Yes	60
	Partially Sighted	Ed. 121.5	1-5	R & S	Sanchez Sch. (S.F.) Demonstration class at SFSC	2 R 1 S	Yes	Yes	30
	Deaf	Ed. 121.2	1-5	R	State Sch. for Deaf (Berkeley)	104	Yes	No	36
					Hawthorne School (Oakland)	7			

*Regular session or summer session.

**None reported.

***No offerings as yet.

TABLE VII (continued)

COLLEGE	SPECIAL FIELD	COURSE NUMBER	SEMESTER	WHEN OFFERED *	NAME OF FACILITY	CLASSES AVAILABLE EACH SEM.	DOES MASTER ARE MASTER		HRS. PER SEM.
							TCGR. HOLD	TCGR. SEMI-MAST. PROV?	
SAN FRANCISCO (continued)	Speech Correction	Ed. 121.7	1-5	R	Berkley Pub. Schs;	20	Yes	Monthly	30
					Daly City Pub Schs;	12		Meetings	
	Mentally Retarded	Ed. 121.1	1-5	R	Richmond Pub. Schs;	10		Special Meetings	
					S.F. Pub. Schs.	10	Yes	Yes	
					S.F. State College	10	Yes	Yes	
SAN JOSE	Speech Correction	Ed. 121.6	1-5	R	Alameda City Schs.	2	Yes	Yes	15
					Oakland Pub. Schs.	10			
					S.F. Pub. Schs.	30			
	Orthopedically Handicapped	Ed. 121.6		R	Sonoma State Home	6	Yes	No	
					Alameda City Schs.	1	Yes	Yes	30
					No. Calif. School for C.P. Children	1			
	Physically Handicapped	Psy 203	2	R & S	Santa Clara Co. Schs.; San Jose City Schs.		Yes	No	20-25
					Chandler Tripp Schs; Santa Clara Co. Schs.; San Jose City Schs.		Yes	Not Yet	18-20
SAN JOSE	Speech Correction	Ed. 121.6	3-6	R	Santa Clara Co. Schs.; San Jose City Schs.	7(city) 2(co.)	5 do	Yes	19-20

* Regular session or summer session.

TABLE VIII

RELATED AGENCIES UTILIZED IN TEACHER TRAINING PROGRAMS IN SPECIAL EDUCATION
(State Colleges only)

COLLEGE	NAME OF FACILITY	TYPE OF FACILITY (Hosp.Clinic, State School, etc.)	TYPE OF PATIENTS	NO. OF CHILDREN AVAIL. FOR STUDY	SUPPORT OF TRNG (col. or institn)	USE MADE OF AGENCY		OTHER DIRECT EXPERIENCES WITH HCPD GROUPS
						Observ- ation	Student Teaching	
CHICO	Amer Jay Hamilton Lab. School	Elem. School	Normal	325	Col.clinic; ea.classrm tchr.	X	X	
	Chico Cer. Pal.Sch	City School	Cerebral Palsied	60	Col.clinic director, sch.nurse, principal	X	X	Adv.students obsrv. all trtmt given GPs for 4 entire sch days
FRESNO	Fresno Co.Schs. Fresno City Schs.	Spec.class M.R. & Phys. Hcpd	M.R.;Par.Sight; M.D.Hrng;Spch Def;Crippled	300	Stf.members of Col.,and City & Co. Schs.	X	Only in sp.corrn	Fld.wk in grwth & dev. of children
HUMBOLDT*								
LONG BEACH	(Program not yet developed)							
LOS ANGELES	(Contacts are currently being made with various special schools and agencies)							
SACRAMENTO	Bac.Co.Schs	City and County public schools	M.R.;Deaf; Spch. def; crippled		College & public sch. staffs	X		Spch.def.cases occas.contact college directly
	Cedars Developmntl School	Sch.for M.R. children	Feebleminded	70		X		
	Bac. Child Home		Under priv.			X		
	Sonoma State Home	State instn for Feebleminded	M.R.			X		
SAN DIEGO	B.D. Public School	Pub.CitySchs.	Part.Sight	20	Col. &	X		
			Oral deaf	50	Public School	X		
			Spch.def.	1200 pr.wk	Staffs	X		

* No report submitted.

TABLE VIII (continued)

RELATED AGENCIES UTILIZED IN TEACHER TRAINING PROGRAMS IN SPECIAL EDUCATION

COLLEGE	NAME OF FACILITY	TYPE OF FACILITY (Hosp. Clinic, State School, etc.)	TYPE OF PATIENTS	NO. OF CHILDREN AVAIL. FOR STUDY	SUPERVISOR (col. or institn)	USE MADE OF AGENCY		OTHER DIRECT EXPERIENCES WITH HDCPD GROUPS
						Observation	Student Teaching	
SAN DIEGO (continued)	S.D. Public Schools	Pub. City Schs.	M.R.	800	Col. & Public School Staffs	X	X	
			Crippled	100		X		
			Homebound Convalesc.	100-175		X		
			Soc. Em. Dist. Ed. Ret.	1000		X	X	
			Maladjusted (visiting tchr program)	1400		X	X	
SAN FRANCISCO	Navy Hospital	Hospital	Aphasics	8	Col. Stf member	X		
	Cerebral Palsy Youth Group	Evening Class Spec. Correction	Cerebral Palsy	15	Col. Stf member	X	X	
	Sanchez School	S.F. Pub. Schs.	Part. Sight	30	Col. & Pb. Sch. Staff Member	X		
	Sunshine School	S.F. Pub. Schs.	Blind					
	Calif. St. Sch. for Blind	Resident Sch.	Blind	120	Col. & Sch. Stf	X	X	
	Recreation for Blind	Priv. Org.	Blind & Part. Sight.	50	Col. & Agency Staff	X	X	Obsv'n of Camp at Enchanted Hills
	Variety Club Blind Babies Foundation	Spon. by Variety Club	Blind infants pre-sch. child	120	Col. Staff mem; Advs. Stf. & Fld. Workers	X		Students may accompany field workers
	Stanford Hospital	Hos. Eye Clinic	Visual def.	Indef.	Col. & Clnc. Stf Member	X		
	Hawthorn School (Oakland, Calif.)	Pub. day class for deaf	Deaf	60	Col. Stf. mem. & Sch. tchr.	X	X	Students assist with supervn of playground, lunch & rest periods

TABLE VIII (continued)

RELATED AGENCIES UTILIZED IN TEACHER TRAINING PROGRAMS IN SPECIAL EDUCATION

COLLEGE	NAME OF FACILITY	TYPE OF FACILITY (Hosp.Clinic, State School, etc.)	TYPE OF PATIENTS	NO. OF CHLDREN AVAIL. FOR STUDY	SUPERVISN OF TRNG (col. or instn)	USE MADE OF AGENCY		OTHER DIRECT EXPERIENCES WITH HDCPD GROUPS
						Obser- vation	Student Teaching	
SAN FRANCISCO (continued)	Gough School (SF)	Pub.Sch for Deaf	Deaf	35	Col.staff mem.	X		
	Calif.St.Sch.for Deaf	Resident Sch.	Deaf	250	Col.staff.mem Sch.prmv.supy	X	X	Playgrnd suvsn by stud.tchrs.
	Health Dept. S.F. Pub.Schs.	Vis. & Hrng. Consvtn prgm	Normal	300 dly	Col.stf mem survg pub. health nurse	X		Participation in grp hrng testing prgm.
	Berkley Pub. Schs	Pub. Schs	Normal	300 dly	Col.stf mem & Sch.stf mem	X		Participation in grp hrng testing prgm.
	S.F.Hrng Society	Comm.Chest Organization	Spch.def. Hrng.prob	varies	Col.stf mem & opthal- mologist	X		
	Stud.health Ser S.F. St.College	State College	Normal	1500	Col.stf mem			Audiometric testing by student tchrs.
	No.Calif.Sch. for C.P. Children	State School	C.P. spch defectives	40	Sch.stf.spch correctionist	X	X	Select student tchrs.work with selected spch. cases
	Calif. State School for the Blind	Resident Sch.	Blind Sch. defectives	150	Col.Stf mem.	X	X	Select student tchrs. work with selected spch. cases
	May T. Morrison Rehab. Center	Non-profit Clinic cent.	Grp'd Spch- defectives	100	Clinic Director	X	X	
	Sonoma State Home	State institution for feeble- minded	Mentally deficient	3200	Col.stf mem. & Inst. Psy- chiatrist	X	X	Intrnshp.prgm: testing, guid., soc.case work & recreation

TABLE VIII (continued)

RELATED AGENCIES UTILIZED IN TEACHER TRAINING PROGRAMS IN SPECIAL EDUCATION

COLLEGE	NAME OF FACILITY	TYPE OF FACILITY (Hosp. Clinic, State School, etc.)	TYPE OF PATIENTS	NO. OF CHILDREN AVAIL. FOR STUDY	SUPPORT OF TRNG (col. or instn)	USE MADE OF AGENCY		OTHER DIRECT EXPERIENCES WITH HCPD GROUPS
						Observation	Student Teaching	
SAN FRANCISCO (continued)	Calif. Youth Auth.	St. Schs at Whittier, Ventura, Paso Robles, & Los Guilicos	Juvenile delinquents	2000	Col. stf mem. & C.I.A. Chief of Training & Treatment	X	X	Internship, prgm: testing, guid., soc. case work & recreation
	Goodwill Indus. (S.F., Calif.)	Type of sheltered workshop	All types severely handicapped	200	State Dept of Ed. Rehab. Services	X		
	Porter Elem. Sch. (Alameda)	Public Sch.	Multigrade CP group	10	Col. stf. mem & Spec cls tchr	X	X	
	Shriners Hosp Orpl Chldn (S.F.)	Hosp. supported by Shriners	Mostly surgi- cal cases	70	Col. stf. mem & Supt. of Nurses	X		
	Stanford Conv. Home (Palo Alto)	Conv. H sk & crpl chld.	Mostly rheu- m. & spst T.B.	70	Col. stf. mem & Inst. stf. mem.	X		
	Sunshine Sch. (S.F.)	S.F. Pub. Sch. for crippled	Various types cripples	100	Col. stf. mem & Sch. stf. mem	X		
SAN JOSE	Sunrise Sch. (Hayward, Calif.)	Alameda Co. Sch.	Multigrade C.P.	30	Col. stf. mem & Co. Spvr. of Spec. Educa.	X	X	Opportunity for Stud. tchrs to work with other groups
	No. Calif. Sch. for C.P. Children (Redwood City)	State Residential School	C.P.	40	State Dept. Ed Col. stf. mem; UC Diag. & Resch Cent; Sch. stf. member	X	X	Obsv. of C.P. child. in therapies. Stud tchrs assist in feed. & trng & cooperate on fld. trps for rsnt children.
SAN JOSE	San Jose Public Schools	City Schools	Speech defective	Many	Col. stf. mem & sch. spch. Correctnsts	X	X	Making of tape recordings of school child.

TABLE VIII (continued)

RELATED AGENCIES UTILIZED IN TEACHER TRAINING PROGRAMS IN SPECIAL EDUCATION
(State Colleges only)

COLLEGE	NAME OF FACILITY	TYPE OF FACILITY (Hosp., Clinic, State School, etc.)	TYPE OF PATIENTS	NO. OF CHILDREN AVAIL. FOR STUDY	SUPERVISOR OF TRNG (col. or institn)	USE MADE OF AGENCY		OTHER DIRECT EXPERIENCES WITH HROPD GROUPS
						Obser- vation	Student Teaching	
SAN JOSE (continued)	Chandler Tripp School, S.J.	State & county supprtd sch.	C.P.; Spch Def; M.R.	38	Col.stf.mem & Sch.stf.mem	X	X	
	Stockton State Hospital (Stockton)	Neuropsychi- atric Hosp.	N.P.		Col.Stf.OTR & Hosp OTR	X		2 mos intern- ship in O.T.
	Stanford Conv.Hom	Conv.Home for sick & crippled children	Rheumatic Fever	30-40	Col.Stf.OTR & Instrn.OTR	X		2 mos intern- ship in O.T.
	St. Joseph's Hosp. (S.F., Calif.)	Gen.Med. & Surg. Hosp.	Med. & Surg. Orthopedic	30	Col.Stf.OTR & OTR Dir & of Hosp.			2 mos intern- ship in O.T.
	May T. Morrison Rehab.Center	Non-profit Clnc. Cent.	Post-polio Indust.Accid.	50-100	Col.stf.OTR & OTR Dir of Gen			2 mos intern- ship in O.T.
	Children's Hosp. of East Bay (Oakland)	Child Dev. Clnc.	Gen. Med. & Surg; rheu- matic fever		Col.stf.OTR & OTR Dir of Hosp.			2 mos intern- ship in O.T.
	Langley Porter Clnc (S.F.)	Neuropsychiatric (adults & child- ren)	N.P.	40	Col.stf.OTR & OTR Dir of Clinic			3 mos intern- ship in O.T.
	Children's Hosp. (S.F.)	Gen.Med & Surg.	Post-polio	30-35	Col.stf.OTR & OTR Dir of Hosp.			2 mos intern- ship in O.T.
	Santa Clara T.B. Sanatorium (San Jose, Calif.)	County institution	T.B.	38	Col.stf.OTR & OTR Dir. of Institution			2 mos intern- ship in O.T.

TABLE IX

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY, SOCIALLY OR ECONOMICALLY DEFICIENT (all sub.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
CHICO	Number of book titles	128	32	20	19	74	6	166	45	13	144	12	659
	Number of volumes	154	44	20	22	82	7	190	103	16	182	12	832
	No. of journal titles												32
	Miscellaneous materials												50
	Standard references												11

* Excluding standard references.

TABLE IX (continued)
LITERARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY DEFICIENT (all subj.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
FREMONT	Number of book titles	83	23	11	21	84	20	17	27	9	168	185	678
	Number of Volumes	130	27	65	23	117	30	17	39	12	227	330	1017
	No. of journal titles	20	5	3	4	2	1	--		6		2	43
	Miscellaneous materials	4	1	6	2	8	12	2		15		10	60
	Standard references												7

* Excluding standard references.



TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY, SOCIALLY OR MORALLY DEFICIENT (all subj.).	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
HUMBOLDT	Number of book titles	9	5	15	9	71	19	5	21	9	82	34	279
	Number of volumes	9	5	15	9	76	19	5	27	9	87	34	295
	No. of journal titles	10	3	--	1	2	--	--		3		2	21
	Miscellaneous materials	--	--	--	--	--	--	--	--	--	--	--	--
	Standard references												10

* Excluding standard references.

TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed	
LONG BEACH	Number of book titles	11	6	12	16	35	2	36	40	23	103	16
	Number of volumes	12	6	13	16	40	3	41	57	25	127	22
	No. of journal titles	22	--	--	--	--	--	5	--	--	6	2
	Miscellaneous materials	--	--	--	7	--	6	1	1	--	1	--
	Standard references											6

* Excluding standard references.

TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION *	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY DEFICIENT (all subj.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
LOS ANGELES	Number of book titles	6	5	12	11	95	10	4	107	4	95	28	377
	Number of volumes	7	9	12	15	133	13	5	284	9	110	31	628
	No. of journal titles	22	3	--	1	--	1			4		2	33
	Miscellaneous materials	**	--	--	--	--	--	--	--	--	--	--	**
	Standard references												6

* Excluding standard references.

** Possess a considerable number of uncataloged pamphlets and monograph items.

TABLE IX (continued)
LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY, SOCIALLY OR RACIALLY DISADVANTAGED (all subd.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeble-minded or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
SACRAMENTO	Number of book titles	5	6	8	8	20	8	--	33	9	76	15	192
	Number of volumes	6	10	8	8	25	9	--	34	12	84	22	219
	No. of journal titles	16	3	--	--	1	--	--	1	2	2	6	31
	Miscellaneous materials	17	18	6	3	3	7	3	17	7	9	23	113
	Standard references												9

* Excluding standard references.

TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY DEFICIENT (all subj.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeblebodied or delicate	Mentally retarded	Mentally gifted	Mentally disturbed		
SAN DIEGO	Number of book titles	39	31	75	37	98	18	6	46	11	284	199	844
	Number of volumes	82	45	114	45	130	32	6	76	12	366	308	1216
	No. of journal titles	21	10	3	3	2	4	1		8			52
	Miscellaneous materials	**	**	**	**	**	**	**	**	**	**	**	**
	Standard references												15

* Excluding standard references.

** Possess an extensive collection of pamphlets, courses of study, federal and state publications and other miscellaneous materials.

TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION*	EDUCATION OF THE PHYSICALLY HANDICAPPED						EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY DEFICIENT (all subd.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeble-minded or defective	Mentally retarded	Mentally gifted	Mentally disturbed		
SAN FRANCISCO	Number of book titles	47	28	70	54	114	36	19	69	13	294	96	845
	Number of volumes	83	50	100	117	258	59	24	115	25	425	135	1121
	No. of journal titles	27	10	7	6	3	4	3		16		2	78
	Miscellaneous materials	25	6	3	11	9	9	4	6	4	1	8	91
	Standard references												10

* Excluding standard references.

TABLE IX (continued)

LIBRARY RESOURCES IN VARIOUS AREAS OF SPECIAL EDUCATION
(State Colleges only)

COLLEGE	TYPE OF PUBLICATION	GENERAL WORKS IN SPECIAL EDUCATION *	EDUCATION OF THE PHYSICALLY HANDICAPPED							EDUCATION OF THE MENTALLY EXCEPTIONAL			EDUCATION OF THE CULTURALLY DEFICIENT (all subj.)	TOTALS
			General works	Visually handicapped	Acoustically handicapped	Speech defective	Orthopedically handicapped	Feeble-minded or delicate	Mentally retarded	Mentally gifted	Mentally disturbed			
SAN JOSE	Number of book titles	82	23	83	30	220	34	92	232	30	363	81	1270	
	Number of volumes	135	29	114	39	482	51	100	465	52	584	97	2148	
	No. of journal titles	25	8	1	3	1	2	--		11		5	56	
	Miscellaneous materials	--	35	14	30	4	37	22	4	3	21	66	236	
	Standard references												9	

* Excluding standard references.

V

SUMMARY OF FINDINGS

Employment needs and vocational opportunities

One of the specific objectives of this study was to arrive at a realistic estimate of the approximate number of special education teachers that California would need to train and employ during the decade 1951-1960 in order to develop an optimum program of special services in the various areas of exceptional children. In arriving at the figures presented the following factors were given consideration: (a) public school population estimate and predicted increase for the period considered, (b) incidence of the various handicapping conditions in the public school population, (c) state-approved figures for recommended class size and/or case load in each of the special areas, (d) an estimate of the present number of special education teachers in the areas under consideration, and (e) teacher replacement estimates for each successive year and for the total ten year period.

Upon this basis it was estimated that the following optimum number of teachers would be trained in California in the designated areas each year for the decade:

<u>Area</u>	<u>Optimum each year</u>
Blind	10-15
Partially sighted	15-20
Deaf	25-35
Hard of hearing	200
Speech correction	125-150
Mentally retarded	450-500
Cerebral palsied	45-50
Other types of orthopedic handicap	45

However, in view of the uncertainty of the times and in the light of the low figures for teacher training recruitment during the past decade in the relatively well established areas, it seems more logical and realistic to assume that fifty to sixty per cent of the optimum numbers would be trained during the decade as follows:

<u>Area</u>	<u>Probable each year</u>
Blind	5-8
Partially sighted	7-10
Deaf	12-18
Hard of hearing	50-75
Speech correction	75-100
Mentally retarded	250-350
Cerebral palsied	25-35
Other types of orthopedic handicap	22-25

Recommended standards

This study indicated that certain over-all standards were essential to an adequate teacher education program for exceptional children. The following factors were considered as basic:

1. A qualified resident faculty. This faculty should have professional training in its respective areas of specialization and actual clinical practice and teaching experience with exceptional children in those areas. In addition, appropriate consultants and specialists should be available as resources.
2. Adequate curriculum offerings. These offerings should be sufficient in scope and content to adequately prepare teachers in each of the areas of specialization.
3. Adequate physical facilities. Specialized equipment, clinical facilities, training aids and materials, and demonstration classrooms as are essential to a functional program should be available.
4. Available community resources. The teacher education center should be so situated that opportunities for observation, clinical practice and student teaching are readily accessible.
5. An adequate library. In addition to a library in the general field of education a technical library in special education should be a part of the training institution's facilities.
6. Regional needs. Programs should be planned on a regional basis and in terms of need in order that maximum service may be provided and that per capita costs may be kept at a minimum.

Existing Programs in Special Education in California Colleges and Universities

Institutions surveyed.

Included in this study were the nineteen accredited institutions in California which offer programs of teacher education in the field of exceptional children. This total is comprised of the following administrative categories:

1. Nine state colleges under direct administration of the Division of State Colleges and Teacher Education, California State Department of Education;
2. Three institutions administered by the Board of Regents, University of California;
3. Seven privately endowed universities and colleges.

Of this total, fifteen institutions submitted the completed questionnaires upon which this report is based: all nine in category (1) above, two in category (2) above and four in category (3) above.

Curriculum offerings.

It was found that courses concerned with the education of the exceptional child are becoming more prevalent in the institutions studied. Eight of the nine state colleges and five of the six other colleges and universities which reported offer at least one survey course dealing with the

general field of exceptional children. Moreover, emphasis on special education as a pre-requisite to professional competency in the field of education was apparent from an analysis of the data submitted by the state colleges. Five of these institutions require special education courses in curricula regarded as being outside the field of special education; eight of these schools recommend such courses as electives in curricula outside the field. Eight state colleges recommend special education courses as electives in their general teacher education programs, although only one of these institutions has established this as a requirement for all teaching credential programs.

In terms of major and minor curriculum programs in special education the data presented indicate a sporadic development, on the whole, throughout the state college system. Chico offers undergraduate minors in the areas of speech correction and the hard of hearing and both a major and minor in speech correction on the graduate level. Humboldt offers a curriculum minor in speech correction on both undergraduate and graduate levels. Los Angeles offers undergraduate minors in the areas speech correction and the mentally retarded. San Diego offers graduate curriculum majors and minors in speech correction and the pertinent areas of concentration for the Master of Arts degree. San Francisco offers graduate majors and minors and undergraduate minors in the areas of the blind, partially sighted, deaf, hard of hearing, speech correction, mentally retarded and the physically handicapped; in addition, undergraduate majors in the areas of the deaf and the blind, and a graduate major and an undergraduate minor in the area of the socially maladjusted is offered. San Jose offers undergraduate majors in the areas of the orthopedically handicapped--specifically in occupational therapy--and the mentally retarded, and a graduate major and undergraduate minor in speech correction. Neither majors nor minors in special education are offered at Fresno or Long Beach. Sacramento did not submit a report relative to this aspect of the study.

The most extensive and complete program of teacher education in the field of exceptional children was that at San Francisco State College--largely due to the fact that that institution had been designated by the State Department as a teacher education center in the field. In the areas of the blind and the partially sighted accredited credential course sequences are being offered by only one institution. In the area of the deaf three institutions offer programs, one of which is an accredited credential sequence. Five colleges and universities offer programs in the area of the hard of hearing; only one of these is an accredited credential sequence. In the area of speech correction seventeen institutions reported programs; twelve of these are accredited credential sequences. Twelve reported programs in the area of the mentally retarded; of these, seven are accredited credential sequences. As yet, no credential program in the area of the orthopedically handicapped, including the cerebral palsied, has been established by the State Department of Education; in this area, nevertheless, two institutions offer teacher education programs and another presents an occupational therapy program. Very little in terms of an organized teacher education program has been offered to date in the area of the gifted child and in that of the emotionally disturbed. Sacramento State College offers one course concerning the psychology and education of the gifted child. In the area of the emotionally and socially maladjusted San Diego State College reports one course and San Francisco State College conducts an internship teacher training program in cooperation with the California Youth Authority.

With regard to training for administration and supervision of special education, it was reported that sixteen colleges and universities are accredited to recommend candidates for general administrative credentials and that ten of these schools are further accredited to recommend candidates for special subject supervision credentials in those areas of special education in which the schools concerned had accredited credential programs.

Several institutions reported courses which are actually offered under the immediate direction of the education, psychology or sociology departments. Although many of these courses are closely allied with or related to the field of special education and therefore help to strengthen the programs of students in the latter field, the tabulation given in this report does not include such data.

Student enrollment.

Figures that were reported by all colleges and universities relative to the number of students enrolled in special education courses show that the number of persons preparing to teach in the various areas of exceptional children is not sufficient to meet current and future demands. This indicates that recruitment procedures are not as effective as they might be.

Professional staff.

A total of forty-four individuals were reported as full time or part time special education professional staff members in the state colleges included in this study. An analysis of the relevant data provides the following statistical classification:

Academic rank

Professors	6
Associate Professors	11
Assistant Professors	22
Instructors	3
Lecturers	2

Highest degree held

Ph.D.	18
Ed.D.	2
M.A.	19
M.E.	1
M.S.	1
A.B.	2
O.T.R.	1

Time currently devoted to teacher training in special education

Full time	21
Part time	23

The majority of part time staff members are concurrently instructing in

other departments of their respective institutions. Some of the people, however, are concurrently in the employ of local school districts or related agencies. It was reported that all staff members were qualified in terms of professional training and experience in working with exceptional children.

Specialized facilities.

It was generally reported that opportunities for observation and clinical practice appropriate to the areas of special education involved were both ample and satisfactory. Arrangements with local school districts for teaching facilities were reported to be adequate in most instances. There is evidence, however, that while some colleges indicated a well established, cooperative relationship with related agencies in the immediate and/or neighboring vicinities, there was generally reflected the need for more effective utilization of community resources.

Materials, equipment and library resources.

Although some state colleges submitted reports which indicate substantial inventories of equipment, materials, training aids, laboratory facilities and clinical arrangements--most frequently in the area of speech correction--the need for more adequate facilities and equipment in other areas of special education was apparent in most cases. Furthermore, while the extent of the library resources that were reported might appear to be adequate, it is probable that a thorough re-check would likely find a number of book and journal listings to be of a more or less general educational, psychological or sociological nature rather than references specifically related to the field of special education.

Analysis of program costs.

Since only six of the state colleges submitted the financial data requested, it was impossible to make an adequate state-wide analysis of the costs of teacher education programs for exceptional children. In five of the colleges the average per capita cost for students in special education was about the same as the per capita cost figure for all students in the institution concerned. It should be emphasized, however, that it was difficult for these schools to obtain accurate information; hence the figures given in tables IV and V should be interpreted as approximations.

Employment needs and vocational opportunities

1. Because the data set forth on employment needs and the probable expansion of special education programs in the next ten years have a significant bearing on the future of the education of exceptional children in California, it is recommended that the State Department of Education continuously study and supplement that section of this report. The findings should be made available to school administrators and to colleges and universities, particularly as apply to the numbers of exceptional children and their need for educational opportunity, as such data forms the basis for programs both in the public schools and in the teacher education institutions.
2. The following suggestions concerning teacher recruitment are offered for implementation by the California State Department of Education and the teacher education institutions:
 - a. School administrators should be stimulated to make all teachers aware of the needs of exceptional children and to encourage those who evidence interest and potential ability to prepare themselves in specialized areas.
 - b. Teacher education institutions should be encouraged to make their students generally aware of the opportunities in special education and actively recruit interested and capable personnel.
 - c. Parents and organized community groups interested in the welfare of youth should be made aware of the vocational opportunities in special education in order that they might encourage promising young people to enter the field.
 - d. The possibility of more scholarship and fellowship grants for teachers in special education should be further explored in terms of both private and public sources.

Existing teacher education programs in California

3. The data indicate that the training offered has not been developed in terms of a pattern to meet state-wide needs. Many offerings in both the state colleges and the other colleges and universities are sporadic in nature and are not organized in terms of the facilities, faculty and course offerings needed to prepare adequately trained teachers. The programs of all institutions should be carefully examined by the institutions, themselves, in terms of:
 - a. local and state-wide need--with regard to both the number of children to be served and the vocational opportunities in the field,
 - b. course offerings and professional staff,
 - c. equipment,
 - d. community resources for observation and clinical experience,

- e. opportunity for student teaching, and
 - f. library facilities.
4. The several areas concerned with exceptional children are unevenly served. For example, while sixteen institutions report programs in speech correction, only eleven are offering work in the education of the mentally retarded, although as a consequence of mandatory legislation, the continuing demand for teachers is much greater in the latter area.
 5. It is apparent that more attention should be given by teacher education institutions to the need for orienting all teachers and administrators to the major problems of the exceptional child. Although eight of the nine state colleges and five of the six other colleges and universities reporting offer survey courses dealing with the education and psychology of exceptional children, it is significant that only one of these institutions designates such a course as a requirement for recommendation for general teaching credentials.

Modification of programs and standards

6. Examination of the programs of the reporting institutions indicates the need for a more intensive study of curriculum standards in the various areas of the exceptional child. While the suggested standards given in this report represent the opinions of a number of persons working in the field, they should not be considered as the best which can be developed. It is recommended that the State Department of Education appoint a state-wide committee to further study the standards upon which programs developed in the various institutions might be based. This committee might also study the possibilities for programs for both emotionally disturbed and gifted children.
7. There is also considerable evidence to show the need for an intensive study of state credential requirements in the several areas of exceptional children. The same state-wide committee might be further assigned to study and recommend revision in the existing credential patterns.
8. Careful consideration should be given to the long range planning of training facilities in the state colleges. The following recommendations of this report should be carefully re-examined at the end of a three year period:
 - a. All state colleges should be encouraged to give a survey course in the education and psychology of the exceptional child. This course should be staffed by a person who has training and experience with exceptional children. Such a course should be made available to all teachers, or its essential content should be included within the framework of the over-all teacher education program.
 - b. All state colleges should be encouraged to offer training in the specific areas of the exceptional child where there are indications of a heavy demand for personnel. At present the areas presenting the heaviest demand appear to be those of the mentally retarded, the hard-of-hearing, and the speech defective. No

program should be initiated, however, without giving serious study to the problem of adequate staffing and available resources for developing a functional program. This should necessarily include a study of local need and the offerings of neighboring institutions.

- c. A permanent center for the education of teachers of the deaf, the visually handicapped and the orthopedically handicapped, including the cerebral palsied, in more than one state college is not recommended at this time. The data indicate that the actual and potential employment opportunities in these fields are limited. Moreover, the training in these areas, particularly that of the deaf, is best accomplished by full time attendance at a properly staffed and equipped institution. A center for these programs is now established at San Francisco State College. However, due to the expressed need for additional training of teachers now in service, in the Los Angeles area, it is recommended that such courses in the above mentioned fields as are essential to meeting these needs be offered temporarily at a state college in that locality.

APPENDIX

Each participating institution was requested to submit a report on each course offered in special education. Because of space limitations it is only possible to include one representative report from each of the areas of exceptional children with which this study is concerned.

REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Education of Exceptional ChildrenNO. OF UNITS 2 or 3 LEVEL Upper Division & Graduate
(In sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Survey of various types of physically, mentally and socially handicapped children, characteristics, methods of diagnosis, and suggested educational adjustments.

REQUIRED BACKGROUND OF EXPERIENCE NEEDED:

Undergraduate or graduate standing in education, psychology or allied fields.

EXPECTED OUTCOMES:

Awareness of major problems in the education of physically, mentally, and socially maladjusted children.

TEXTS AND REFERENCES:

Baker, H.J., Introduction to Exceptional Children.
National Society for Study of Education, Education of Exceptional Children.

EXPANDED DESCRIPTION OF CONTENT:

Orientation to education of exceptional children; blind; partially sighted; deaf; hard of hearing; speech defects; orthopedically handicapped including the cerebral palsied, cardiac, tubercular and other types; mentally retarded; educationally retarded; gifted; personality diviates; juvenile delinquents; guidance of handicapped; California school organization for handicapped.

EXPANDED DESCRIPTION OF METHOD:

This course is offered on a lecture-discussion basis. It is taught by specialists in each of the various areas of special education. Opportunity for visitation to various classes and institutions for handicapped children; individual reports in fields of interest.

REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Education & Methods of Teaching the BlindNO. OF UNITS 2 & 2 LEVEL Upper Division & Graduate
(In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Part I. Introduction to education of blind, the blind child and how he learns, introduction to Braille, curriculum aids and materials, methods of teaching.

Part II. History of education of blind, organization and administration of schools, classes and special facilities for blind in area of elementary and secondary education, educational and vocational guidance. Prerequisite Part I.

REQUIRED BACKGROUND OF EXPERIENCE NEEDED:

Basic teaching credential and/or recent courses in Child Growth and development, Child Psychology, Mental Hygiene, Curriculum Development, The Elementary School. Successful experience with normal children.

EXPECTED OUTCOMES:

Ability to do a successful job in teaching the blind child either in a State School for the Blind or in a class in the public school which will enable the blind child to take his place in the sighted community and his social group.

TEXTS AND REFERENCES:

Chevigny, Hector, and Braverman, Sydel, The Adjustment of the Blind.
 Lee, M. and Lee, D., The Child and His Curriculum.
 Lowenfeld, Berthold, The Blind Preschool Child.
 Maxfield, Kathryn, The Blind Child and His Reading.
 Zahl, Paul, Blindness

EXPANDED DESCRIPTION OF CONTENT:

The course includes: Definition of blindness; the philosophical, psychological and sociological foundations in the education of blind children, their implications for curricular planning on the elementary and secondary school level; the acquisition of skill in and methods of teaching of Braille reading and writing; the adaptation of material to the needs of the blind child; problems in supervision and administration of classes; problems in vocational and educational guidance; evaluation of present facilities and changing trends.

EXPANDED DESCRIPTION OF METHOD:

Lecture, discussion method. Observation of classes in the public schools and at the State School for the Blind is required. Demonstration classes during summer school provide facilities for observation on the campus. Laboratory facilities including Braille equipment, Braille writers, talking books, recorders, etc.

REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Education of Children with Impaired VisionNO. OF UNITS 4 (2 per sem.) LEVEL Upper Division & Graduate
(In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Part I. Eye health, eye efficiency, visual difficulties, routine vision testing, observational skills, adaptation of environment, curriculum and materials for partially seeing.

Part II. History of education of partially seeing, organization and administration of classes and facilities in public schools. Curriculum adaptations and methods of teaching the partially sighted child. Prereq. Part I

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

A valid teaching credential and demonstrated ability to teach normal children with success.

EXPECTED OUTCOMES:

A functional knowledge of vision and its relationship to physical, mental and emotional growth; and understanding of the child's specific needs and proper provision for such in order that the child may be a successful and contributing member of his social group.

TEXTS AND REFERENCES:

Hathaway, Winifred, Education and Health of the Partially Seeing Child.
Scobee, A Child's Eyes.

State of Illinois, Illinois Plan for the Visually Defective.

American Journal of Ophthalmology, Archives of.

Ophthalmology, Sight Saving Review, Vision Digest

Also selected pamphlets from the National Society for the Prevention of Blindness.

EXPANDED DESCRIPTION OF CONTENT:

The course includes: Study of vision, visual efficiency, eye hygiene, vision testing, demonstration of equipment, study of refractive errors, eye diseases; the partially seeing child, his needs and how to meet them including the setting up of a resource room, selection of equipment and materials; preparation of materials in large type and use of projected and recorded materials; study of the various plans in use for meeting the needs of the partially seeing child and the adaptation to particular situations.

EXPANDED DESCRIPTION OF METHOD:

Workshop plan: Each student plans for a hypothetical, typical class of partially seeing children. These he describes in detail as to age, grade, general health, mental age, eye difficulty and implications of this difficulty for his program. He then plans the resource room, equipment, materials, program, etc. for these children. Experience in preparation of materials in large type and by means of recording equipment and projection is required.

Observation of classes for the partially seeing is also required. Lectures are given from time to time by specialists on lighting, visual aids, projected materials, various recording machines, and orthoptics. Films are used throughout.



REPORT OF INDIVIDUAL COURSE OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Speech Training for Deaf
 NO. OF UNITS 6 (3 per sem.) LEVEL Upper Division & Graduate
 (in Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Development of oral communication emphasis on kinesiological phonetics. Voice production, articulation, rhythm, accent, fluency, and inflection. Procedures to develop use of residual hearing. Prerequisite: Part I or permission of instructor.

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

Preparation in child and adolescent development, basic speech correction and phonetics. Teaching experience with normal children desirable.

EXPECTED OUTCOMES:

Ability to establish speech with deaf children, to maintain it, and to correct faults. Understanding of procedures to develop use of residual hearing including methods of preparing materials, methods of presenting listening exercises, methods of developing speech with assistance from hearing.

TEXTS AND REFERENCES:

American Annals of the Deaf, Bound Volumes 1940-date
 Avondino, Josephine, The Babbling Method
 Goldstein, Max, The Acoustic Method
 Haycock, C. Sibley, The Teaching of Speech
 The Volta Review, Bound Volumes 1940-date
 Whitthurst, M. W., Auditory Training

EXPANDED DESCRIPTION OF CONTENT:

Methods of teaching speech: Whole word, syllable, and elements; Methods of developing articulation of various elements of speech and correcting errors; developing exercises for voice production and for improving voice quality; exercises for development of rhythm of speech; exercises in stress and pitch variation. Preparation of materials for auditory training, recordings, exercises; how to devise and how to use. Understanding of limitations and possibilities of auditory training. Use of tactual, visual, and auditory stimuli.

EXPANDED DESCRIPTION OF METHOD:

All students enrolled are expected to spend three hours per day observing classes of deaf children. The observation period serves as a laboratory to reinforce lecture and practice work done in theory classes, and is frequently accompanied by actual practice in speech work with deaf children prior to the student teaching period. The theory classes are lecture, experiment, project work, use of amplifying equipment, selection of recordings, story-telling for auditory training and language work.



REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Education of Hard of Hearing ChildrenNO. OF UNITS 2 or 3 LEVEL Upper Division & Graduate
(In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Educational diagnosis, school adjustment, and classroom placement of hard of hearing child. Methods in auditory training. Modern simplifying devices. Teaching child how to use hearing aid. Fundamentals of speech training. Social and psychological implications of hearing impairment.

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

Adequate preparation in child and adolescent development and in curriculum and instruction. Teaching experience desirable.

EXPECTED OUTCOMES:

Understanding of problems of communication of hard of hearing children and implications for classroom placement in terms of proper seating and lighting; characteristic patterns of educational and social development with means of adjustment; limitations of mechanical hearing aids and procedures of auditory training; importance of speech conservation and correction and principal speech problems encountered; simple reports of audiometric findings.

TEXTS AND REFERENCES:

Bound Volumes: The Volta Review, 1940-date
The Deaf and the Hard of Hearing in the Occupational World; United States
Department of Education
Davis, Hallowell, Hearing and Deafness
Frampton, M and Rowell, H.G. Education of Handicapped Volume II
Hack, A.O. Education of Exceptional Children
Wallin, J.E.W. Children With Mental and Physical Handicaps
Waldeman, Wade, Aretz Hearing and the School Child

EXPANDED DESCRIPTION OF CONTENT:

Lectures, reading, case records on social and psychological problems of adjustment to hearing loss. Illustration by recordings of typical speech problems and analysis of needed help. Materials for auditory training assembled by the students under direction and techniques for their presentation discussed and presented by the students. Work on visual aids and their proper use with hard of hearing children to stimulate auditory efficiency. Language arts problems of hard of hearing children presented. Discussion of various degrees of hearing loss in terms of audiometric findings and in terms of utilization of residual hearing. Educational planning for hard of hearing children including classroom placement and special services. Use and maintenance of individual and group hearing aids.

EXPANDED DESCRIPTION OF METHOD:

Sample, typical audiometric findings are presented, analyzed, and discussed from a non-technical viewpoint for understanding of various types of hearing loss. Educational recommendations based on the findings and supplemented by other educational data, are considered. Types of special services, including itinerant teachers, contact classes, and special seating are presented. The class all have occasion to operate a group hearing aid



and to learn the various settings and controls, means of checking and maintaining the aid, types of group hearing aids, manipulation of microphones. Individual hearing aids are presented, examined and tried on. Each individual selects and presents a recording for auditory training purposes with visual aids. Other auditory training materials are presented by class and instructor. Types of speech exercises suitable for hard of hearing classes are devised after examination of published materials. Lectures and reading on psychological and social aspects of hearing impairment and case histories are presented.



REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Remedial Speech (second quarter)
 NO. OF UNITS 2 LEVEL Upper Division & Graduate
 (In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

A continuation of Sp. 102A with emphasis on some of the major speech problems: delayed speech, stammering and voice problems. Observation of clinic cases. Prerequisite: Sp. 102A

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

Junior, Senior or graduate standing. First quarter of Remedial Speech.

EXPECTED OUTCOMES:

Further insight into the speech correction field; an understanding of the psychology of the speech handicapped; the importance of psychotherapy in the treatment of speech problems; methods of therapy; characteristics, causes and treatment of various types of defects.

TEXTS AND REFERENCES:

Ainsworth, Speech Correction
 Backus, Speech in Education
 Berry and Eisenson, The Defective in Speech
 Johnson, et al., Speech Handicapped School Children
 Van Riper, Speech Correction (text for course)
 West, Kennedy, Carr, Rehabilitation of Speech
 Books on games, exercises, and drills for various age levels of school children.

EXPANDED DESCRIPTION OF CONTENT:

During this quarter, students observe various types of cases in the speech clinic; reports of observations are made, and cases, problems, therapy are discussed in class and with the clinician when possible. When possible, the students observe speech correctionists in the public schools - class work (speech improvement), small groups, individuals. Direct and indirect therapy is presented; avenues of approach (auditory, visual, tactual, kinaesthetic and motor-kinaesthetic) are discussed; conditions under which speech is considered "defective" are stressed with emphasis on society's attitude toward the defective. Characteristics, causes and therapy for the following types of problems are outlined and discussed: Idiotalia, infantile perseveration, delayed speech, non-English speaking child, regional and foreign dialect, sibilant defects (lispings), voice, stuttering, theories of causation.

EXPANDED DESCRIPTION OF METHOD:

Informal lectures, class discussion, demonstrations, films, records, exhibits of materials; outlines, charts and reports presented by the studentsassignments....oral and written. Periodic tests and examinations. A notebook, supplementary text, is required: contains lectures, reading notes, suggestions for therapy, techniques, and any material (pictures, games, articles) that would be useful and interesting in the field. Occasionally a guest speaker is presented, a specialist in his field.



REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Curriculum and Methods for Mentally Retarded ChildrenNO. OF UNITS 3 LEVEL Upper Division & Graduate
(In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Selection, organization and presentation of curricular materials for mentally retarded children.

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

All students enrolled in this course must be holders of general elementary or general secondary credentials. It is hoped that they are all experienced teachers.

EXPECTED OUTCOMES:

This course is designed to assist the individual teacher meet the problems of teaching the mentally retarded child in the elementary or secondary school. Since many of the students in this class also teach adjustment classes, the problem of method and curriculum for those classes is also part of the course.

TEXTS AND REFERENCES:

No single text. The bibliography used by the instructor consists of more than 400 separate books or pamphlets which are available to the students in the college library or in the instructor's own files.

EXPANDED DESCRIPTION OF CONTENT:

The curriculum and method for teaching the mentally retarded and socially or emotionally maladjusted child consists of an intensive study of the psychology of these two types, and the curriculum and methods for the various subject matter fields including reading, arithmetic, language arts, social studies, industrial arts, and fine arts.

EXPANDED DESCRIPTION OF METHOD:

Since the class consists of three types of individuals, regular classroom teachers, special room teachers, and adjustment room teachers, an attempt is made to individualize the course to meet the specific needs of the students. A modified workshop technique is used to permit the students to build curriculum materials that will meet their needs.



REPORT OF INDIVIDUAL COURSES OFFERED IN SPECIAL EDUCATION

TITLE OF COURSE Advanced Problems in Teaching the Cerebral PalsiedNO. OF UNITS 2 or 3 LEVEL Graduate
(In Sem. Hrs.) (Upper Division, Graduate or both)

CATALOG DESCRIPTION:

Consideration of problems of child guidance, working with parents of cerebral palsied children and specific techniques helpful in education and training of cerebral palsied children. Emphasis upon team work approach to solving medical, educational and therapeutic problems. Prerequisite: Teaching the Cerebral Palsied Child.

REQUIRED BACKGROUND OF EXPERIENCES NEEDED:

Experience with normal children, or background of education preparatory to this teaching. Basic work in teaching the cerebral palsied child is a prerequisite unless the student has had experience with cerebral palsied children and demonstrates understanding of the cerebral palsied. Therapists or others may be admitted on recommendation of instructor.

EXPECTED OUTCOMES:

An over-all ability to analyze and cope with the problems which will arise in a cerebral palsied school set-up; school problems of curriculum, programming, therapies and their coordination and carry over, transportation, parent relationships and education. Understanding of community services, volunteer help, guidance and vocational problems.

TEXTS AND REFERENCES:

Burton, Mary, and Jennings, Sage H., Your Child or Mine.
Carlson, E.R., Born That Way.
Gratke, J., Help Them To Help Themselves.
Rutherford, Berniece, Give Them A Chance To Talk.
Library of Reprints from The National Society For Crippled Children and Adults. 11 South La Salle Street, Chicago, Illinois.

EXPANDED DESCRIPTION OF CONTENT:

Such problems as volunteer help, parent assistance, transportation, rest periods, lunch periods, coordination of therapies and school work, carry over of therapies, relationships to the rest of the school system, classroom problems in teaching, adjustments, etc. all find their way into this course as needed.

EXPANDED DESCRIPTION OF METHOD:

Books and reprints of a general nature are assigned as reading. Problems are analyzed through individual conferences and discussions either in small groups or with the class as a whole. Visual aids, guest speakers and observations and visits to schools and institutions are fully utilized. Individual case studies of cerebral palsied children are thoroughly examined. Observation of children in operating programs is required.







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